

UNIVERSITY OF ARIZONA

HD4147 .E5

Emmerson, Harold Co/The Ministry of Work

mn



3 9001 03850 2129





The Ministry of Works

THE NEW WHITEHALL SERIES

is prepared under the auspices of

THE ROYAL INSTITUTE OF PUBLIC ADMINISTRATION

and is edited on its behalf by Sir Robert Fraser, O.B.E.

*The purpose of the series is to provide
authoritative descriptions of the present work
of the major Departments of Central Government.*

Already published

THE HOME OFFICE (*reprinted*)

THE FOREIGN OFFICE (*reprinted*)

THE COLONIAL OFFICE

THE MINISTRY OF WORKS

In preparation

THE SCOTTISH OFFICE

THE MINISTRY OF LABOUR AND
NATIONAL SERVICE

THE MINISTRY OF PENSIONS AND
NATIONAL INSURANCE

THE MINISTRY OF TRANSPORT
AND CIVIL AVIATION

HD
4147
E5
THE NEW WHITEHALL SERIES

*The Ministry
of
Works*

SIR HAROLD EMMERSON

G.C.B., K.C.V.O.

Formerly Permanent Secretary
Ministry of Works

LONDON · GEORGE ALLEN & UNWIN LTD
NEW YORK · OXFORD UNIVERSITY PRESS INC

First published in 1956

This book is copyright under the Berne Convention. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the Copyright Act 1911, no portion may be reproduced by any process without written permission. Enquiry should be made to the publisher.

*Printed in Great Britain
in 10 point Times Roman type
by C. Tinling & Co. Ltd.
Liverpool, London and Prescott.*

Acknowledgment

*

I WISH to thank members of the staff of the Ministry of Works who have helped in the preparation of this book, a former member who collected much of the material, and Miss P. Sylvester who has done most of the typing.

H.E.

Contents

*

PART ONE: INTRODUCTION AND HISTORY

- I. *General Introduction* page 11
- II. *The Growth of the Ministry of Works* 15
The early Office of Works—The work of the Office of Works—The 1939–45 War and after.

PART TWO: BUILDINGS AND SUPPLIES

- III. *Accommodation in the United Kingdom* 25
Official residences—Headquarters offices in London—Regional headquarters and local offices—Standards of office accommodation.
- IV. *Buildings and Services for Special Needs* 33
Buildings for research and development—Buildings for the Post Office—Housing, hostels, camps, etc.—Miscellaneous institutions—Storage buildings—Defence and fire prevention—Opencast coal—Services in Northern Ireland—General.
- V. *Accommodation Overseas* 42
The nature of the service—Accommodation provided—The building programme—Standards.
- VI. *Furniture and Supplies* 47
Furniture and other equipment—Removals, maintenance, cleaning and disposal—Fuel—Provisioning and stores—Organisation.

PART THREE: THE HERITAGE OF THE PAST

- VII. *Royal Parks and Gardens, Palaces, Osborne, Ceremonial* 57
Royal Parks and Gardens—General policy and aims—The Royal Botanic Garden, Edinburgh—The Royal Botanic Gardens, Kew—Palaces—Osborne House—Ceremonial.

	page
VIII. <i>Public Buildings and Works of Art</i>	70
The Houses of Parliament—Royal Courts of Justice—County Courts—Courts of Law in Scotland—Sheriff Courthouses—Museums and galleries—Records—Statues—Trafalgar Square and Parliament Square—Works of art.	
IX. <i>The State as Guardian of the Past</i>	82
Historic buildings of the Crown—Ancient Monuments—The upkeep of buildings of historic or architectural interest—Organisation.	
PART FOUR: RELATIONS WITH INDUSTRY	
X. <i>Building and Civil Engineering and Building Materials</i>	97
The Ministry's policy—Assessing the load of work—Machinery for consulting industry—The Apprenticeship Councils—Building materials—Works and Buildings Emergency Organisation.	
XI. <i>Building Research and Development</i>	107
Research—The Technical Information Service.	
PART FIVE: ORGANISATION AND MANAGEMENT	
XII. <i>Organisation and Staffing</i>	115
The administrative function—The executive function—Headquarters organisation of administrative divisions—The executive divisions—Finance Division—The Directorate of Establishments—Scottish Headquarters—The Regional Organisation in England and Wales—Staffing—Staff relations.	
XIII. <i>Some Aspects of Organisation and Management</i>	131
Finance and control of expenditure—Contracts—Requirements for new buildings—The maintenance of buildings—Directly employed industrial staff—Buildings overseas—Managing the Ministry's properties.	
XIV. <i>Conclusion</i>	155
<i>First Commissioners of Works since 1851, Ministers of Works, Parliamentary Secretaries, Permanent Secretaries</i>	
	160
<i>Chart I</i> Headquarters Organisation—Administrative Divisions	164
<i>Chart II</i> Headquarters Organisation—Executive Divisions and Specialist Groups	165
<i>Chart III</i> Organisation in a typical Region in England	166
<i>Index</i>	167

PART ONE

Introduction and History

CHAPTER I

General Introduction

*

EVERY three months the Treasury publishes the numbers of staff employed by Government Departments, which for this purpose are divided into eight main groups. The Ministry of Works appears in the group described as Agency Services. This is because most of the Ministry's staff are engaged on work for other Departments. They have to meet the needs of the Government Service, at home and abroad, for office accommodation, residences and buildings of all kinds and for supplies of furniture, equipment and other goods. It follows that the scale of the Ministry's activities and the size of its staff and organisation largely depend on decisions outside its own control. If another Government Department is expanding, or if a new service is being started, the Ministry of Works has to provide the buildings, equip them and maintain them. For instance, when the Ministry of National Insurance was established it was the Ministry of Works which had to find and equip a network of local offices throughout the country as well as headquarters and regional offices. Again, when the first atomic energy establishments were built at Harwell, Windscale and other places it was the Ministry of Works as the civil building department which was responsible for collaborating with the scientists in the design of these novel structures, and for their erection, as well as building houses for the staff who work there.

But the Department has other functions besides those of meeting demands from other branches of the Government Service. The Ministry traces its origin to members of the Royal Household who looked after the King's Works in the Middle Ages, and these early duties are still preserved in traditional functions connected with ceremonial occasions and with the maintenance of Royal Palaces, the Houses of Parliament, the Royal Parks and some historic buildings of the Crown such as the Tower of London and Windsor Castle. To these duties have been added such unusual tasks as running a convalescent home at Osborne in the Isle of Wight since 1902 and managing Brompton Cemetery since 1852. For many years the Ministry has been concerned in the preservation of ancient

monuments and historic buildings. A considerable extension of work for buildings of historic and architectural interest has resulted from the Historic Buildings and Ancient Monuments Act, 1953.

An entirely different function of the Ministry is its concern with the building and civil engineering industries and the many and varied industries which produce building materials. This interest has grown out of duties assumed during the 1939–45 war when the Government took control of the national economy and the Office of Works, while retaining in a greatly extended form all its previous functions, became the Ministry of Works and was made responsible for controlling the national building programme. Control by statutory powers has gone, but the Department still maintains close contact with industrial interests, keeps a watch on trends of employment and is ready to give assistance to enable the building and civil engineering industries to operate efficiently and to play their part under conditions of full employment. The Ministry keeps the building research programme under review and disseminates information and advice on various aspects of building operations; publicity is given to the results of research and development by lectures, films, exhibitions and demonstrations. In this work the industries and the associated professions give their full co-operation.

The volume of work varies from year to year, and questions of organisation, management and control of expenditure need constant attention. The staffing problems alone are of more than usual importance. Over half the 13,000 non-industrial staff are professional and technical officers. They include archaeologists, architects, artists, clerks of works, designers, draughtsmen, engineers, scientists and surveyors. The order is alphabetical and the list is not exhaustive. Then there are about 16,000 directly employed industrial staff represented by a number of different trade unions. Although wages and conditions are for the most part settled nationally, a good deal has to be left to the Department in the management of its labour. In the list of industrial staff which is compiled for the purpose of wage rates there are over 160 grades, and all the various building trade craftsmen count as only one grade, although they are the largest in number. Some of them have a Shakespearean flavour—boatman, deer dresser, forester, gamekeeper, grave digger, locksmith, riverman, seamstress, sexton, stone-carver, and vine keeper. The yeomen warders—‘the Beefeaters’—are on the Ministry’s staff and now have certain conditions of their work settled by joint negotiation.

Probably no Department, other than the Treasury, has wider contacts within the Government Service than the Ministry of Works. Every Government Department has to be housed and the Ministry has dealings with all of them, at headquarters and in the regions.

Many of them have special requirements and the Ministry's professional staff have to work closely with the engineers and scientists of such Departments as the Post Office, the Department of Scientific and Industrial Research, the Ministry of Supply and the Atomic Energy Authority. In addition to contacts in connection with accommodation, operational buildings and supplies services, the Ministry has contacts of a different kind with a number of Departments and authorities. On ceremonial occasions the staff work with the Great Officers of State, and there is co-operation at all times with officers of the Royal Households. Other traditional duties bring the Ministry into close association with the Home Office, the Scottish Office, the Foreign Office and the Commonwealth Relations Office. Then there are matters such as the preservation of historic buildings and the effect of town planning legislation on which there must be close consultation with the Ministry of Housing and Local Government and the Department of Health for Scotland. Because of its interest in the building and civil engineering industries and the building materials industries, the Ministry is associated also with Departments in the trade and industry group in the framing of economic policy. In addition to these inter-departmental relationships the Ministry is, of course, in touch with many grant-aided or voluntary bodies on different aspects of the Ministry's work.

Since 1851 there have been 42 First Commissioners and nine Ministers of Works. The Minister of Works still retains the title of First Commissioner of Her Majesty's Works and Public Buildings; this is necessary partly because property is still held abroad in the name of the First Commissioner. Some Ministers have preferred the old title and have used it on suitable occasions, though it is no longer heard in the House of Commons. Each holder of the office has made his own personal contribution to the shaping of the Department, and a Minister can influence the standard of taste on public occasions and in the architecture and furnishing of Crown buildings at home and overseas. The nature of the work calls for continuity of policy in most things. Political changes are more likely to affect the scale of the work than the way in which it is done, and the personality and even the personal interests of a Minister are of greater influence than his politics. At least two First Commissioners have their names recorded in works undertaken during their term of office: Sir Benjamin Hall (1855-58) after whom 'Big Ben' is named; and George Lansbury (1929-31) who was responsible for the Lansbury Lido in Hyde Park. Most Ministers have taken a special interest in the Royal Parks, and several have made notable contributions to the aesthetic side of the Department's work. It is, however, not surprising that within a period of office which seldom lasts more than

two years, a Minister has difficulty in getting to know the full extent of his responsibilities. The variety of the work is a constant fascination and there must be few Ministers who have left the office without feelings of regret.

In his book on the Foreign Office in this series Lord Strang says it is easier to describe what the Foreign Service is than to state what it does. In describing the Ministry of Works it is easier to say what it does than to describe how its work is done. A catalogue of buildings and services would be easy to give, but tedious to read. What is more difficult is to convey the sense of a living, changing and virile organisation. In this book, after a short account of the growth of the Ministry, reference is made to different types of Government buildings to illustrate the variety of the work and the services required to design, construct, equip and maintain them. Part III describes the older responsibilities of the Ministry and the work of preservation of buildings and Part IV refers to those duties which are largely the outcome of the last war. Finally in Part V there is a description of the present organisation and staffing of the Ministry, and some aspects of organisation and management are discussed.

CHAPTER II

The Growth of the Ministry of Works

The early Office of Works—The work of the
Office of Works—The 1939-45 War and after.

*

THE EARLY OFFICE OF WORKS

SOME time during the Tudor period, or perhaps even earlier, it became the practice of each monarch to issue instructions for the guidance of the Office of the King's Works. Those issued by James I indicate that even then the Office was highly organised and was controlled by a Board, under the chairmanship of the Surveyor General, which included the Master Mason, the Master Carpenter and the Comptroller, or Finance Officer. The first Surveyor General who is well known as an architect in the modern sense was Inigo Jones who held office from 1615 to 1643. With his appointment the architectural initiative, which had been held by the great ministers and courtiers, passed back to the Crown. Two famous buildings which he erected still remain under the Ministry's care—the Queen's House at Greenwich and the Banqueting House in Whitehall.

After the Civil War King Charles II appointed Sir John Denham as Surveyor General, more as a reward for his loyalty than for his knowledge of buildings. Sir Christopher Wren was appointed Deputy Surveyor and on the death of Denham in 1669 Wren succeeded him. Wren remained Surveyor General for 49 years and it was to the Office of Works that he attracted an array of talent which included Grinling Gibbons as Master Carpenter and Master Carver and Robert Streeter and Thomas Highmore as Serjeant Painters. Sir John Vanbrugh and Nicholas Hawksmoor both held office under him.

There was little change in the duties of the Office in the eighteenth century and the first half of the nineteenth century, but there were changes in the organisation because of the apparent difficulty of settling the right relationship between the architect and the administrator and of ensuring proper financial control. After Wren's departure in 1718 a layman took control and the architectural work was done by such illustrious figures as Sir William Chambers and

Robert and James Adam. Later, in 1796, lay control was superseded by professional control when Sir William Chambers became Surveyor General. Other well known architects who served as officers of the Board were Sir Robert Smirke, Sir John Soane and John Nash.

In 1832 the duties of the Surveyor General were amalgamated with those of the Commissioners of Woods, Forests and Land Revenues. The arrangement was not satisfactory. There was a Clerk to the Board, but he was simply a recording officer and there was virtually no organisation to deal with administrative, establishment and accounting work. Even the paymaster's post previously existing in the separate Office of Works was abolished and the three Commissioners had to open accounts in their own names at the Bank of England to deal with the funds voted to the Office. An even more serious defect was that the combination of the two offices made it possible to use land revenues of the Crown for the purpose of public works instead of meeting the cost out of money voted by Parliament. This removed expenditure from Parliamentary control and in 1851 the two offices were separated again. The senior of the three Commissioners, who was a Member of Parliament, became the First Commissioner of Works and the political head of the new department. Her Majesty's principal Secretaries of State and the President and Vice-President of the Board of Trade were associated with the First Commissioner of Works as members of the Board of Works, but in fact these supernumerary Commissioners were never active. The Secretary became the senior officer of the Board. Though later there were many changes in detail as the work increased, the general form of organisation persisted until 1940 and the Office of Works is commonly regarded as originating in 1851. It was one of the provisions of an Act of 1852 that the Commissioners of Works were to observe the instructions of the Treasury (if not inconsistent with existing Acts of Parliament) in all matters connected with the duties of their office, and Treasury control over the Office of Works was much closer than over other Departments; indeed the Treasury appear not infrequently to have regarded the Office as a subordinate part of their own Department.

Although so many changes were made in the arrangements for directing and controlling the works organisation, the staff remained small. In 1705 the staff consisted of a paymaster, a purveyor, six clerks of works, six labourers in trust whose duty it was, apparently, to look after individual large buildings, and three writing clerks. In 1785 the establishment was two resident clerks and two assistant clerks, six clerks of works, a 'keeper of all the engines' and two other engineers, ten labourers in trust, four constant carpenters, a master bricklayer, a master plumber, an office keeper, a messenger,

eight constant labourers, and a gate keeper. By 1812 the staff had increased by four, but was otherwise unchanged.

In the early days it was customary for all the clerks of works to attend once a month at the headquarters of the Office, situated originally in the old Palace of Westminster and from the reign of Henry VIII in Old Scotland Yard. The amount of work done seems to have varied a good deal in the early nineteenth century, when we first have information on the hours worked. In 1815 attendance was only required on one day in the week, but in 1817 attendance was required from 10 a.m. to 4 p.m. on six days a week. This change appears to have been short lived, since on becoming First Commissioner after the reorganisation of 1851, Sir Benjamin Hall found that the Secretary had not attended for two years owing to sickness, that the Surveyor was of doubtful sanity and also absent, but that the Deputy Surveyor attended 'sometimes on a Friday'—the traditional day for Board meetings—while the clerks of works attended on the second Tuesday of each month.¹ It is not surprising in the circumstances that Sir Benjamin found that over 2,000 audit queries had been outstanding for over a year; he forthwith appointed a new Secretary.

THE WORK OF THE OFFICE OF WORKS

During the nineteenth century there were great changes in the nature and scale of the Department's work. It continued to be responsible for the maintenance of Royal palaces, houses, parks and roads, but it became necessary to provide an increasing amount of accommodation outside the palaces for servants of the Crown. At first each Department was responsible for maintaining the accommodation allocated to it, but gradually the Office of Works took over responsibility for accommodating Government Departments, though it was not until 1877 that Customs and Excise buildings were put into the care of the Office of Works. There was, of course, a spate of construction in the nineteenth century and many important buildings were designed and erected by the Office or by leading architects of the day who were commissioned for the work. These buildings included the Houses of Parliament destroyed by fire in 1834 except for Westminster Hall, the British Museum, the National Gallery, the museum buildings at South Kensington, the Law Courts, the old Treasury, and the Foreign Office and Home Office in Whitehall. The Office also undertook various responsibilities which were later surrendered to more appropriate authorities. For example, there were metropolitan improvements such as Battersea, Kenning-

¹ It is an odd coincidence that since 1946 Regional Directors of the Ministry have met at Lambeth Bridge House on the second Tuesday of each month.

ton and Victoria Parks, the Victoria Embankment, the Chelsea Embankment and Bridge, Westminster Bridge and the old Horseferry Bridge where Lambeth Bridge now leads to the present headquarters of the Ministry. This kind of work was eventually transferred to the Metropolitan Board of Works, later the London County Council. One legacy which still survives is the appointment of conservators to various commons, e.g., Wimbledon and Putney Commons and Mousehold Heath near Norwich, and the right to approve the bye-laws of various open spaces. Another odd acquisition was the Brompton Cemetery, which was vested in the Office in 1852. It is still run by the Ministry.

Other functions acquired during the nineteenth and early twentieth century which have remained include the control of metropolitan statues, the provision and maintenance of residences and offices for H.M. representatives overseas, the national museums and galleries, research institutions, post offices and telephone exchanges, buildings for the Customs and the Inland Revenue, county courts, employment exchanges, and a host of others. Responsibility for the protection of ancient monuments, which arose out of the growing public interest in antiquities, was conferred on the Ministry when Caesar's Camp on Wimbledon Common was threatened with destruction in the late nineteenth century.

By 1914 Government headquarters staff of all Departments in London numbered 18,000 and in addition there were large numbers of staff in local offices in both London and the provinces. The Office of Works then owned, or was responsible for maintaining, about 3,300 buildings. The work of the Office greatly increased during and after the war. Hospitals, clinics and training centres were equipped and maintained for the Ministries of Pensions and Labour, and sanatoria were built and housing schemes were prepared for the Ministry of Health. A number of housing estates and hostels for munition workers were taken over from the Ministry of Munitions, and pending their disposal the Office was forced for many years to act as a housing authority.

Between the wars many new services were undertaken as the Government's activities extended to new fields. One of the most important was the design and construction of buildings for the Department of Scientific and Industrial Research, which was created in 1918. There was also the development of programmes of specialised buildings on a nation-wide scale, of which the programme of employment exchanges is an example. After the war a programme was prepared of permanent buildings specially designed for this purpose. The scale of operation is shown by the fact that when this type of work had to be suspended in 1939 a programme of 186 new employ-

ment exchanges was shelved. A similar but larger programme of new buildings had been undertaken for the Post Office and work for that Department, especially on telephone exchanges and allied buildings, became by far the largest single group of building work carried out; in 1939 an outstanding programme valued at £16,000,000 of all kinds of building work for the Post Office had to be discontinued.

THE 1939-45 WAR AND AFTER

During the second world war the Department had to meet an enormously increased demand for accommodation for the Government service. It also undertook new functions in connection with the Government building programme and the building and civil engineering industry, and when this happened the Office of Works was transformed into the Ministry of Works. The story of these developments has been told in detail in the volume on *Works and Buildings* in the *History of the Second World War* (H.M.S.O., 1952).

Government staffs trebled between 1939 and 1942. Premises had to be found, surveyed, adapted, furnished, provided with air raid shelters and maintained. The load of work involved is shown by the fact that the staff of the Department rose from 6,000 in 1939 to 22,000 in 1946. Plans had been made from 1936 onwards to move from London large parts of the staff of central Government Departments, if this became necessary owing to enemy attack, and though these schemes were never fully carried out, large groups of less essential staff were moved to the provinces in order to free London accommodation, reduced by air raid damage, for more important use. Temporary buildings were erected in the provinces and a vast variety of buildings, including houses and hotels, had to be requisitioned under Defence Regulations. The activities of eighteen Ministries with similar powers were co-ordinated by a central register of accommodation, covering some 300,000 premises, which was maintained by the Ministry of Works.

The Ministry constructed Royal Ordnance Factories as the agents first of the War Office and then of the Ministry of Supply, and also carried out a vast amount of other building work of all descriptions. From 1937 to 1945, £250,000,000 was spent by the Ministry of Works on building projects. All this had to be done at speed and with the strictest economy in labour and materials. About one third of the expenditure went on explosive and filling factories and the remainder was devoted to underground factories, stores of every description, hostels and houses for munition workers, the Women's Land Army and many other users, camps for the Armed Forces, building workers and the men who constructed the Mulberry Harbours, hospitals for the Armed Forces and civilians, laboratories

and research stations, wind tunnels, and a host of specialised or subsidiary buildings and works. In addition, Crown buildings and services had to be maintained and repaired.

The transformation of the Office of Works into the Ministry of Works and Buildings in 1940 was not, however, merely due to this great expansion of its buildings and supply work; the Department had to be equipped for new functions not previously undertaken by the Government. During the first World War, 95 per cent of building work in the country came to be on Government account, and 16 Government authorities competed unrestrainedly for labour, forcing up prices and causing a high labour turnover. During the rearmament period and the second World War, both Government and industry wished to avoid the recurrence of such a situation, and joint national consultative machinery was set up in 1937. By the end of that year, however, there were again twelve competing Government Departments with a combined Government building programme of urgent defence and civil defence works equivalent to well over a year's output of the capacity of the building and civil engineering industries. It was to meet this situation that a Director General became jointly responsible with the Permanent Secretary for the administration of the Ministry of Works. The Permanent Secretary remained the accounting officer and the recognised official head of the Ministry, supreme in matters of finance, while the Director General, assisted by subsidiary directorates, was responsible for the direction in the widest sense of the Government building programme.

Briefly, the course taken was to restrict civil building by a licensing system and to keep under review the size, distribution and capacity of the industry by means of the registration of all contractors and by requiring statistical returns in respect of all jobs undertaken. The available labour was allocated between all Departments requiring building work, and arrangements were made with the Ministry of Labour to facilitate the supply and retention of men on sites of approved works. Economy of materials was fostered, and the output of the industries producing bricks, cement and other building materials and supplies was regulated to meet the needs of the national programme. Distribution of materials to approved work was ensured through the normal trade channels at controlled prices. Steel and timber were allocated to the Ministry and directed to approved sites. In conjunction with the Ministry of Supply, the distribution and hire of contractors' plant were controlled.

The Ministry also assisted in the repair of houses and factories damaged by air raids wherever this was beyond local resources. A Directorate of Emergency Works was set up, mobilising contractors and materials into a Works and Buildings Emergency Organisation

and itself employing a mobile labour force which was later used on departmental and other building work in areas of scarce labour. The Ministry undertook the collection of scrap metal from unusual sources, especially railings and gates. From 1942 to 1945 it also acted as the agent of the Ministry of Fuel and Power for extracting opencast coal.

The Minister was made responsible for examining methods and machinery for dealing with the problems of reconstructing town and country after the war, and the Ministry became the 'Ministry of Works and Planning', but in 1943 the Ministry of Town and Country Planning (now absorbed into the Ministry of Housing and Local Government) was created, and the Ministry of Works assumed its present title. The Ministry continued to carry out a great deal of preparatory work on the more technical aspects of post-war building policy and planning.

For the first few years after the war, emergency building programmes were undertaken, particularly temporary housing, schools, training colleges and the like. At the height of the pressure, when building materials were scarce, the Ministry operated a service over the country as a whole designed to stimulate the production of materials and to ensure their distribution in accordance with an orderly scheme of priorities. The scheme of building licensing, which only came to an end in 1954, was also operated in such a way as to ensure that the limited resources available were utilised with proper regard to the national needs. The Ministry's policy has been to relax controls gradually, while preserving close contacts and good relations with industrial interests.

The Ministry was also involved in a dual process of rehousing the staffs of Government Departments and derequisitioning buildings taken during the war. Owing to the cold war staffs could not be reduced as rapidly as had been hoped and the rate of derequisitioning was slower in consequence. Buildings overseas were sadly neglected during the war, and new residences and offices are still needed to meet new conditions. The largest programme in this country has been that for atomic energy and other research establishments, and the Works Directorate has been engaged on an extraordinary variety of projects not usually associated with the Ministry. Mention is made of some of them in later chapters.

In tackling its problems the Ministry has been helped by a strong regional organisation in England and Wales and a Headquarters in Scotland. The regional organisation was created in 1945 when the provincial staff of the Ministry were brought together and augmented under the control of Regional Directors. The organisation in Scotland has developed from an arrangement of long standing whereby

administrative staffs were stationed in Edinburgh to deal with Government buildings in Scotland. The organisation of the Ministry, both in London and Edinburgh and in the regions in England and Wales, has been freely adapted to meet changing conditions. The present system is described in Chapter XII.

PART TWO

Buildings and Supplies

CHAPTER III

Accommodation in the United Kingdom

Official residences — Headquarters offices in London — Regional headquarters and local offices — Standards of office accommodation.

*

THE Ministry's main activity in terms of staff and expenditure is the provision of buildings for the Government service. These buildings are of all kinds, but it will be convenient to refer first to offices.

From the early nineteenth century onwards the responsibility and cost of providing Government offices was centralised in the Office of Works, and the Ministry has now come to be the largest owner of offices in the country and has acquired a fund of expert knowledge of accommodation for office staffs. Offices are provided by the Ministry for the headquarters staff of Departments, mainly in London and Edinburgh, for their regional headquarters in the provinces, and for local staff in both London and the provinces. Many of the local offices, though used chiefly for clerical work, have specialised requirements, largely because they are visited by the public. Examples are post offices and local offices of the Social Service Departments such as the Ministry of Labour and National Service, the Ministry of Pensions and National Insurance and the National Assistance Board. Altogether some 40,000,000 square feet of accommodation is provided for all these purposes, of which nearly half is in London.

In so far as all these groups have common requirements, e.g., space for general clerical purposes, they receive the same standards of treatment, but each group has its own problems, for which individual solutions are necessary. Throughout all the various types of offices, however, the Ministry's chief problem has been set by changes in the Civil Service, due largely to new legislation and to the extension of Government interests to new fields. In the last decade, in particular, the Ministry's task of accommodating twice the number of Government office staff existing before the war has been made difficult by the destruction of buildings during the war, the subsequent restrictions on building and capital investment, and the increasing rate at which old buildings are considered unsuitable because of higher standards of working conditions.

OFFICIAL RESIDENCES

The best known of all Government offices must be No. 10 Downing Street, the office and residence of the Prime Minister as First Lord of the Treasury, and the usual meeting place of the Cabinet. It was built, with other houses, by Sir George Downing on land leased to him by King Charles II, but he died while building was in progress, and the house subsequently returned to the ownership of the Crown. Extensive repairs were carried out in 1734 by William Kent, and Sir John Soane redesigned the State dining-rooms in 1825. It has been occupied as the official residence of the Prime Minister since it was offered to Sir Robert Walpole by King George II in 1732 and accepted by him on condition that it was entailed as an official dwelling for himself and his successors as First Lord of the Treasury.

No. 11 Downing Street is reserved for the Chancellor of the Exchequer and No. 12 is used as offices by the Government Whips. Other official residences are the flat in 1 Carlton Gardens, occupied since 1946 by the Foreign Secretary, and Admiralty House, the residence of the First Lord of the Admiralty. The Ministry of Works maintains the buildings, and supplies all furniture and equipment. The garden of Nos. 10 and 11 is in the care of the Superintendent of the Central London Parks. Broadcasting and television are often relayed direct from No. 10, which is permanently wired for the purpose.

The Prime Minister has a country house at Chequers in Buckinghamshire, which was presented to the nation in 1917 by Viscount Lee of Fareham, together with an endowment towards its maintenance. The Minister of Works is custodian trustee and from 1928 to April, 1955, the Ministry bore a constantly increasing proportion of the cost of upkeep. Since April, 1955, however, the administrative trustees have had a direct grant-in-aid from the Treasury with the help of which they control the whole estate.

HEADQUARTERS OFFICES IN LONDON

The Ministry is responsible for accommodating 93,000 headquarters staff of the 63 Government Departments in London. These Departments vary in size, from a dozen or so major Departments, of which the largest is the Ministry of Supply with some 8,500 headquarters staff, to Departments having a mere handful of staff. The Ministry of Works has dealings with all of them and has to study their individual needs; these are surprisingly varied and include those of such special services as the Royal Courts of Justice, the Royal Mint and the Government Chemist. Ideally, no doubt, the Civil Service would work much more efficiently if the headquarters staff of each Department could be housed in a single building specially designed for its

use, and if all major Departments were housed close by each other and within easy reach of Parliament. This is an old aspiration; it was expressed in *The Times* of 31st May, 1855 (quoted again in *The Times* a hundred years later):

‘Thus the places where public business is carried on are scattered not over an area but over a long straggling line of upwards of four miles in length, and separated from each other by the most crowded and difficult thoroughfares of the metropolis. It is really impossible to exaggerate the economy of labour, the increase of effective supervision, the saving of time, and the means of effecting necessary reforms and amalgamations, which would be realised to the country if all these scattered offices could be gathered into a few commodious and contiguous buildings.’

But it is not practicable to confine Government staffs to a few ‘commodious buildings’ in Whitehall. There is no room, and even if there were the cost would be prohibitive. In any case the size of staffs fluctuates and the amount of accommodation required varies almost from year to year. For this reason it is the Ministry’s practice, in London and in regional headquarters towns, to provide for permanent requirements in Crown buildings and to hold rented accommodation for short-term needs. By holding tenancies of varying lengths the Ministry’s estate can be adapted to changing circumstances in the most economical way.

Even ten years after the war it is difficult to reach a firm estimate of the need for permanent office buildings. Since the war Government staffs have not fallen to the extent that was expected, due partly to the extension of social services and partly to the defence programme. The Ministry has, therefore, to find the best solution possible within the capacity of the Crown buildings and leased buildings available. In some cases Departments whose work may be closely inter-related have to be located some distance apart, while many Departments have to be housed in several buildings spread over a wide area. These difficulties are reduced by housing as near the centre as possible those sections of the major Departments which need to be within easy call of Ministers, while accommodating further out divisions which are not directly involved in policy making and those Departments whose work is of a comparatively routine character. The situation is gradually being improved by erecting new buildings, either on sites acquired for the purpose or on the sites of old Crown buildings now ready for redevelopment, and by leasing or purchasing other premises in place of existing rented property. This process provides better offices as well as making possible the regrouping of Departments in a more convenient and efficient manner.

Efforts to make the best and most economical use of the office

accommodation available have, since the war, resulted in many movements of staff between buildings. Requisitioned premises have had to be surrendered and new buildings leased, Departments have expanded or contracted, new Departments have been formed and others amalgamated, staff have been moved temporarily from old buildings which needed to be modernised, and there have been the usual changes in an estate of this size with leases falling in. As conditions return to normal these moves are becoming less frequent and more and more Departments are attaining the stability of a permanent home. Even so, partly because of these moves, and partly because most Departments will continue to be housed in several buildings, the average civil servant must expect several moves in the course of his career, quite apart from his moves within his Department on promotion or on change of work.

It seems likely that for many years to come office accommodation for headquarters staff, and for other London and most provincial staff, will fall short of what is desirable in both quality and situation. The bulk of the Ministry's estate consists of Crown buildings erected before the first World War and of premises held on long leases. The former include old buildings such as Somerset House, the Admiralty and the old Treasury, as well as the more recent Victorian and Edwardian parts of Whitehall such as the Home Office, Foreign Office, and War Office, together with the General Post Office (St. Martin's le Grand) and a number of less well known buildings in other parts of London. The premises held on long leases are mostly large commercial office buildings and vary from the very modern to the obsolescent.

At the end of the war a large proportion of Government accommodation consisted of requisitioned buildings and only after ten years of intensive effort to find other accommodation has it now been, or will it shortly be, possible to bring all requisitions to an end. This has been helped partly by a decrease over the last ten years in the size of the Civil Service, partly by more economical use of space, but mainly by renting or building alternative premises. The general shortage of office buildings and the requirements of commerce and industry placed limits on the amount of existing space which could be hired by the Government, and for a number of reasons it was impracticable for the Ministry itself to build in the early post-war years all the new offices that were needed for the Civil Service. Building sites in crowded central areas with many separate owners necessarily take a long time to acquire, whether by private treaty or by compulsory purchase, and over nearly every suitable site private interests had already secured options in anticipation of the return of normal building conditions. At the same time the Ministry's own professional

staff was very fully occupied on constructional works of all kinds, some of which, e.g., atomic energy research establishments, were of first importance and urgency. In these circumstances arrangements were made for a number of private developers to build office blocks to plans and specifications complying with the Ministry's requirements, and to let the entire buildings to the Ministry on long leases. The Ministry itself continued for a while the wartime expedient of erecting temporary blocks of one- or two-storey offices of standard design on building sites readily available in the outer suburbs. In addition work was resumed on a programme of new headquarters buildings in the central area, of which the new building in Horseguards Avenue now occupied by the Board of Trade and the Air Ministry, and the Ministry of Agriculture, Fisheries and Food in Whitehall Place are examples; sites have been acquired, plans prepared and in some cases foundations laid for a number of other buildings.

Government building programmes have always been notoriously subject to delay, and the post-war programme of the Ministry has proved no exception. The reasons for the setbacks are partly the specially difficult conditions of the last few years, including the need to reduce Government spending, and partly troubles resulting from restrictions on capital investment and building with which Government Departments also have to conform. A particular difficulty, however, arises from the special hazards which have always beset large Government building projects in the metropolis. Such schemes attract much attention, and rightly so, for new buildings in Westminster near the Houses of Parliament, the Abbey and other historic buildings, are of great public interest. But when opinion is divided on aesthetic issues it is not easy to reach finality, and the fact that staff are badly housed carries little weight with those who have no enthusiasm for expenditure on the Civil Service. Moreover, the system of financing Government building projects by annual cash grants from current revenue may make it unavoidable for a hard-pressed Treasury to postpone capital expenditure on new buildings even though in the long run it would be cheaper to build than to rent.

REGIONAL HEADQUARTERS AND LOCAL OFFICES

In addition to offices for headquarters staff in London, the Ministry is responsible for regional headquarters and local offices over the whole country. Regional devolution was developed before and during the last war and is now firmly established, particularly in Departments with executive duties outside London. In some Departments, particularly those concerned with social services, the main function of the regional office is to supervise local offices which provide services to

the public. In others the regional offices are more or less self-contained and serve as a means of contact with local authorities and with industry and commerce. A few Departments have no regional organisation and their local offices, if any, are controlled direct from headquarters.

In the regional offices the accommodation required is very much the same as at headquarters. In most regional towns the same problems arise as in London, since the shortage of suitable buildings has been little, if any, less acute. For this reason the temporary office buildings which were erected in regional towns during or soon after the war still provide the major part of regional office accommodation. The Ministry's long-term policy is to accommodate most of the permanent staff in Crown buildings in or near town centres.

Local offices give rise to special problems because they have to be designed and equipped to meet the convenience of the public who visit them as well as to accommodate the office staff. The needs of the offices vary greatly, and in recent years much thought has been given to the requirements of the public, especially when some degree of privacy is desirable, e.g., when a member of the public wishes to discuss his domestic circumstances, his employment, or his income tax. Indeed a great change has taken place both in the official attitude towards these questions and in the standard which the public expects. There was a time when the main business of the employment exchange was to make payments to the unemployed, and the function for which it was originally intended—assisting a worker to find employment—was overshadowed by the dead-weight of unemployment. Today the aim is to make the local offices of the Ministry of Labour and National Service pleasant places to which those who are wanting help in employment matters may come and where they may feel that their individual needs are being sympathetically and confidentially discussed. The local offices of the Ministry of Labour and National Service, the Ministry of Pensions and National Insurance and the National Assistance Board therefore need standards and treatment of accommodation different from those of the 1930s. Unfortunately, although the Departments responsible and the Ministry of Works may have very clear ideas as to what is needed, it is impossible to produce overnight either the buildings or the conditions which are desirable. A number of new post-war buildings have been planned in accordance with modern standards and outlook, but they can only be regarded as a token of what might be done given the resources. Meanwhile efforts are made to improve the appearance and internal construction of the older buildings which are still structurally sound and are likely to be retained for many years.

The Ministry of Works is responsible for nearly 5,000 local offices

of different Government Departments. With the increase in the numbers of local offices, especially since the development of the welfare state, experiments have been tried in bringing together in one building the staff and services of several Departments. This course has many advantages, particularly in the case of the Ministry of Labour and National Service, the Ministry of Pensions and National Insurance and the National Assistance Board, as these three Departments deal with closely related problems. Such an arrangement would usually be more convenient to the public. Moreover, where buildings are shared and the combined staff is not too big, certain economies can be made in such services as cleaning, typing, use of conference rooms, canteens, and reception rooms for the public. It is, of course, much easier to arrive at this conclusion than to carry it into effect. In most towns a central site which would be convenient for housing several Departments is simply not available. Furthermore, where satisfactory accommodation has already been provided it is difficult to justify spending money merely to comply with the principle of joint occupation. Again, these services are not static and the amount of accommodation required varies a good deal according to the growth of population in the town, the level of employment and changes in the service itself. A building which is ideal for its purpose may, within a few years, prove to be too small—or, less frequently, too large—so that the original intention of designing and constructing a building which exactly meets requirements may be defeated by changes in the requirements themselves. Nevertheless, in spite of all these difficulties, and the limitations on the resources available for local offices, considerable progress has been made since the war in bringing together in a modern building the staffs of several Departments with whom members of the public have contacts. It will, however, be a long time before we reach the position when the Minister of Works no longer has to say in answer to a Parliamentary Question that in a particular city ‘there are offices for seventeen Government Departments which are housed in twenty-one sets of premises’ (*Hansard*, 3rd May, 1955). Apart from other advantages, the work of the Ministry would be greatly eased if staffs were concentrated in fewer premises.

STANDARDS OF OFFICE ACCOMMODATION

The Ministry of Works acts as agent for other Departments in providing accommodation, supplies and equipment for the public service. But its function necessarily differs from that of a private estate agent, architect or retailer in relation to his private client. In spending public funds—whether the expenditure is accounted for by the Ministry or by other Departments for whom the work is done—

the Ministry must ensure that the service is fully justified and conforms with standards which have been laid down for Government office accommodation. These standards are necessary not only for reasons of economy and financial control, important as these are; with the enormous variety of services and goods provided by the Ministry, and the different types of staff and offices for whose needs it caters, standards are essential for the guidance of all concerned, whether as administrators, designers, suppliers or consumers.

The formulation and review of accommodation standards also helps in improving office working conditions. The Government, as the largest single employer of office staff in the country, naturally seeks to improve working conditions in offices in the interests of health, efficiency and economy, within the limits of what is financially and technically practicable. In this work the Ministry plays an important part, in consultation with the Treasury and the National Staff Side of the Civil Service Whitley Council and with the assistance of its own experts and those of the Department of Scientific and Industrial Research and other bodies.

In view of the austerity of the war years and the subsequent economic difficulties it will inevitably be some time before working conditions in all Government offices can be brought up to a level which is now considered desirable. Some standards have therefore had to be prescribed only as long-term aims, or for application to new buildings only. Nevertheless, a good deal has already been done to bring Government offices nearer to the best commercial standards.

There are many technical problems of office accommodation, and the Ministry's standards therefore cover a very wide field. The main subjects covered are office layout, lighting, heating, ventilation and similar services, decoration and cleaning, furniture and equipment, and amenities, including staff restaurants, messrooms, etc. The full list would be very lengthy, ranging from building design to the issue of soap and towels, from maintenance of grounds to frequencies of window cleaning, from acoustics to carpets. Experiments and investigations are continually aiming at the improvement of one feature or another of working conditions, or at solving some new accommodation or equipment problem. The work is controlled from headquarters, and the standards are kept under continuous review by an inter-departmental committee of senior officers. New or improved standards, when adopted, can therefore be promulgated rapidly to all Ministry officers throughout the country who are concerned with their application. The standards are not rigid, and account has to be taken of varying conditions of work, e.g., different intensities of illumination are provided according to the work carried out by the occupying staff.

CHAPTER IV

Buildings and Services for Special Needs

Buildings for research and development —
Buildings for the Post Office — Housing, hostels,
camps, etc. — Miscellaneous institutions — Stor-
age buildings — Defence and fire prevention —
Opencast coal — Services in Northern Ireland —
General.

*

IN the last forty years there has been a great extension of building work for Civil Departments of Government, and the Ministry's interests are no longer concerned mainly with offices. Indeed expenditure on office buildings is now less than half the total. For present purposes it is only possible to indicate the scope of other work and little can be said of the technical problems of design which arise both for the architect and the engineer.

BUILDINGS FOR RESEARCH AND DEVELOPMENT

About half the Ministry's total expenditure on new works in recent years has been on buildings for research and development, including atomic energy projects. When it was decided in October, 1945, to examine all aspects of atomic energy and to set up a research and development establishment at Harwell in Berkshire, the Ministry of Supply, who were then generally in charge of atomic energy development, asked the Ministry of Works to join them in examining the scope of the new project and its design and construction. Since that time a continuous and intensive construction programme has been in progress at Harwell and at some twelve other sites in other parts of the country. The value of the building and engineering works carried out is about £50 million, excluding the cost of plant installations, and several original plants have been installed. This work has engaged, in the Ministry of Works alone, a professional and technical staff rising from 200 in 1946 to about 1,000 in 1955, exclusive of administrative and clerical staffs. Accounts have been given elsewhere of some of the more spectacular construction works, such as those provided for nuclear reactors, and of the problems to which they have given rise,

e.g., in the booklet on *Britain's Atomic Factories* published by H.M. Stationery Office. The Atomic Energy Authority has now taken over responsibility from the Ministry of Supply, but the Ministry of Works is still engaged on a building programme for the Authority in connection with general research and weapons research. In the financial year 1955-56 the work done for the Authority is likely to amount to about £6 million.

For the Ministry of Supply and the Department of Scientific and Industrial Research, the Ministry of Works designs and builds factories, research laboratories and testing stations for a great variety of purposes. Some examples are aeronautics, guided weapons, jet propulsion, munitions, technical and general equipment for the Armed Services, electronics, hydraulics, radar, underwater ballistics, water pollution, building, road and fire research, and fish processing. Similar but smaller programmes are carried out for the Admiralty, the Agricultural Departments and the Ministry of Fuel and Power. The secret nature of much of this work has caused the Ministry's contribution to remain little known to the public.

These research establishments include laboratories to meet the specialised requirements of the user departments. Some need special provision for the extraction of dangerous substances, electro-static screening, and temperature control. Then there are such complicated structures as supersonic wind tunnels and ship-testing tanks. Many projects call for entirely new techniques in building and engineering practice. The scientist with a particular field to explore gives the Ministry information on the functions which the buildings, plant and services will be required to perform, and the Ministry's professional officers have to devise means to satisfy these requirements. Instead of simply accepting the stated building requirements of the scientists and engineers, the Ministry's staff have attempted to acquire a knowledge of the research techniques and mechanical plant necessary to achieve these requirements so that they may contribute to the fundamental design and, within reasonable limits, control the planning, foresee problems which might otherwise be overlooked, and phase the building programme to meet the engineering demands. The development of plans often requires the setting up of design teams from both the Ministry and the Department concerned, and research work may be needed in order to devise the most satisfactory and economical method of solving specific problems. Once the basic data are settled and the broad outline of the design is accepted in principle, it is often necessary to place a development contract with an industrial firm to carry out the detailed design of certain items of plant and equipment and the assembly and testing of prototypes. Visits are made to other countries to see how similar requirements have been met and to study

the building, civil and mechanical engineering problems involved. In many cases the solutions to these problems go well beyond previous experience and practice in the professions.

BUILDINGS FOR THE POST OFFICE

During the last few years the research and development buildings referred to above have accounted for more than half the Ministry's total expenditure on new construction; accommodation for the Post Office constitutes the Ministry's second main activity. The Ministry has been carrying out all major Post Office building work since 1858 (indeed the erection of some buildings of special importance was supervised by the Department even before that date) and before the second World War the Post Office had become the Ministry's largest 'client'—a position it may well come to occupy again in the future. In 1953–54 new works and maintenance expenditure on behalf of the Post Office together amounted to about £5 million and this is on the increase.

A large proportion of the work carried out for the Post Office is highly specialised. There are, however, a number of normal office buildings, including the main headquarters offices in London, various regional administrative offices, and the telephone managers' offices, where enquiries are dealt with and the accounts of subscribers are kept. The erection and maintenance of these buildings follows the same pattern as for other Government offices except that, as will be explained later, there are special arrangements for paying for Post Office new work. Of the specialised or operational buildings, the most numerous are post offices, sorting offices and telephone exchanges; but there are many other buildings ranging from garages for delivery vans, and factories and stores, to wireless stations and an engineering and research station.

Some operational buildings, e.g., garages, present no particular difficulty, and existing premises may be taken and adapted for Post Office use. Others, however, present special problems. Frequently the engineers would like to have a central site for a telephone exchange; yet from a town planner's point of view, a telephone exchange may be an uneasy companion for other buildings, especially in residential areas. Large post offices, too, must be centrally placed, usually in the main shopping district, and because of their prominent positions they must be designed to suit their environment. The architectural standards of the Ministry are frequently judged by the buildings erected as post offices, and, though complete agreement is seldom reached in such matters, it is generally accepted that the Ministry has set a high standard of taste and restraint in the design of these buildings.

The Ministry is at present responsible for over 5,000 Post Office

buildings. This figure does not include certain small automatic telephone exchanges which the Post Office itself erects and maintains, or the sub-post offices which are conducted on an agency basis in shops and other buildings where the accommodation is the responsibility of the shopkeeper. The number of Post Office buildings in the Ministry's care is rapidly increasing. Owing largely to the expansion of the telephone service, and also to the need for new premises, the number of new buildings required by the Post Office is now about 350 a year. The rate of building needs to be geared accurately to the Post Office's equipment programme, but this is hard to achieve as the acquisition of sites is a difficult and protracted process; planning legislation has added to the difficulties, especially as it is Government policy to avoid, as far as possible, the use of powers of compulsory purchase. Even so, since technical considerations often cause the Post Office to require large sites in central areas, compulsory purchase is sometimes unavoidable, and occasionally it is necessary to proceed by Act of Parliament; in such cases the Ministry's Directorate of Lands and Accommodation has to handle claims from the affected parties.

The cost of nearly all Post Office new work is met from a special fund known as the Post Office Loan Account. Expenditure from the Loan Account is subject to Treasury control, but as the money does not have to be surrendered if it has not been spent by the end of the financial year, the Post Office has a certain amount of latitude both in forward planning and in adjusting its building timetable. While the cost of new work carried out by the Ministry of Works is recovered from the Post Office Loan Account, the cost of maintaining buildings is borne on the Ministry's normal annual Vote. The Post Office's own engineers are responsible, at the expense of the Post Office Vote, for maintaining all telephone apparatus and all electrical services, and for maintaining (but not installing) heating services. This division of responsibility has arisen largely for historical reasons, and contrasts with the normal procedure by which the Ministry's professional staff are entirely responsible for both erection and maintenance of a complete building and all its services.

HOUSING, HOSTELS, CAMPS, ETC.

Many of the research and development establishments which the Ministry has built for the Ministry of Supply are in remote areas and the Ministry has had to plan and build housing estates for the staff. In all some 10,500 permanent houses have been built since the war by the Ministry, of which about 3,500 were for the Ministry of Supply, the remainder being mainly for the Service Departments, the Forestry Commission, prison staffs and the coastguard service. The Service

Departments have their own housing standards; for other Departments there are two basic designs similar to those adopted, with Government approval, by local authorities. The Ministry also builds houses for its own staff such as custodians of ancient monuments and park keepers where there is no suitable alternative.

The Ministry does not normally let or manage houses except those occupied by its own employees—this is done by the employing Department. The Ministry assesses rents and undertakes maintenance where required; for example, it maintains over a hundred estates for the Ministry of Supply.

The Ministry still has to maintain a good deal of living accommodation which has been left over from wartime activities. During the war hostels were built for factory workers, miners and agricultural workers, and married quarters were built for transferred industrial workers in Government factories. Most of the hostels have been closed or otherwise disposed of, e.g., the National Coal Board has taken over miners' hostels. The married quarters estates are difficult to dispose of. About seventy-five estates have been taken over by local authorities for temporary use, to be replaced in due course by permanent housing schemes, but ten estates containing some 1,600 families remain in the Ministry's hands.

The Ministry erected large numbers of camps during the war for the Armed Forces, prisoners of war and other occupants and took over after the war large numbers of surplus camps erected by the Service Departments. Many were converted for European Volunteer Workers and others were occupied by Polish soldiers. When the latter were demobilised in this country, some continued to live with their families in hutted camps and former wartime hospitals and many passed into the care of the National Assistance Board under the provisions of the Polish Resettlement Act, 1947. The Ministry became responsible for the adaptation, improvement and maintenance of their quarters, and there were at one time some 17,000 Poles in about forty camps. There now remain over 2,000 dwellings scattered over seventeen camps which are run by the National Assistance Board and maintained by the Ministry.

Then there are hostels for colonial students in London and elsewhere which are run by the British Council, and a few hostels for civil servants which are run by the major occupying Departments.

MISCELLANEOUS INSTITUTIONS

Training centres for ex-service men were built on a large scale during and after the war. Many of these centres had been allocated to industry or used for other Government purposes by the close of the resettlement period, but sixteen still remain in permanent use. They

are operated through Remploi—formerly the Disabled Persons Employment Corporation—under the Disabled Persons (Employment) Act, 1944, and the Employment and Training Act, 1948. The Ministry of Works owns and maintains the premises and supplies plant, tools and materials for use by the trainees. Some of these centres contain rehabilitation units for persons suffering from industrial or other injuries.

During the resettlement period the Ministry also provided teachers' training colleges, largely in converted industrial hostels, and agricultural training centres. The Ministry still meets the needs of the Home Office for police training centres; these consist chiefly of converted hostels but three country houses have also been purchased for permanent conversion. The Ministry has also maintained for over 150 years the premises of the Duke of York's Royal Military School for the children of soldiers in the regular army. The school was founded in Chelsea in 1801 and moved to Dover in 1909.

During the war the Ministry built a large number of hospitals. Many were subsequently handed over to the National Health Service, but the Ministry still maintains those associated with the Ministry of Pensions, including Queen Mary's Hospital at Roehampton, specialising in artificial limbs, and hospitals for paraplegics. It also maintains and equips the institutions at Broadmoor, Rampton and Moss Side, and Carstairs, Scotland, which are run by the Board of Control.

A great deal of work is done for the Prison Commissioners, who have a maintenance building organisation of their own but come to the Ministry for work beyond its scope. The Ministry has acquired and adapted premises for Borstals and open prisons of the new type, and is at present engaged in the erection, at a cost of more than £500,000, of the first large security prison to be built in this country for over 40 years. A second permanent security prison, a new psychiatric prison and four new Borstals are planned within the next few years. The Ministry supplies furniture to all prisons and buys the products of prison labour for Government use when they are suitable.

The National Assistance Board is responsible for providing reception centres to give temporary board and lodging to people without a settled way of living, formerly known as vagrants or tramps. The centres are usually provided by local authorities as agents of the Board, but some have been provided by the Ministry.

STORAGE BUILDINGS

In addition to the storage buildings which the Ministry designs and erects for its own purposes—mainly for the Supplies Division—there is a considerable range of storage buildings required by other Depart-

ments. These raise a surprising variety of technical problems, from the point of view of economy in the use of space, and in design, according to the nature of the materials to be stored. For instance, in a store for H.M. Stationery Office, which had to take exceptionally heavy loads, the Ministry took the bold step of designing a building with interior beams of pre-stressed concrete. These carried the loads, while saving about 60 per cent of the steel needed in an orthodox steel-framed structure of comparable strength. The building was the first of its kind in this country, perhaps in Europe, and was probably the most ambitious structure of this type erected up to that date.

The storage of food raises special problems. Where tinned food is concerned, protection is needed against humidity and condensation, and the Ministry has recently experimented with special polythene storage tents inside ordinary stores, for keeping condensation to a minimum. Apart from the usual warehousing type of accommodation, the Ministry erected during the war about 50 cold stores, which are among the most modern cold stores in the country. Between 1943 and 1952 the Ministry's architects and engineers designed and constructed 22 grain silos, the later ones having a pneumatic intake which is a more convenient method of handling the grain than the earlier conveyor systems.

Then there are stores for civil defence, where much of the stock, such as fire hose, is perishable and temperature has to be carefully controlled; the stores have also to be designed so that the stock could be moved out very rapidly in an emergency.

The Ministry has recently experimented with a novel form of outdoor storage for keeping stocks of fertiliser. The fertiliser is placed on hardstanding, and the pile is then 'enveloped' with a special covering. This method of storage has proved successful for certain types of fertiliser, and leaves normal warehousing accommodation free for other stocks.

CIVIL DEFENCE AND FIRE PROTECTION

In addition to plans for emergency accommodation to meet defence requirements, the Ministry is responsible for technical advice to the Home Office and to local authorities on structural precautions in building construction. The Branch which is concerned with civil defence is also responsible for fire prevention and protection in Government buildings, and for co-ordinating fire prevention policy in relation to all the Ministry's normal functions. The Ministry is represented on the Fire Research Board and the Fire Protection Association, and keeps in close touch with both the Home Office and the Department of Scientific and Industrial Research in order to observe the best possible modern practice for fire prevention in

structural design and in the use of building materials. Advice is given to the occupants of all Government buildings on fire risks and precautions. Premises are inspected by fire officers of the Directorate of Works, and instruction is given in the use of fire fighting apparatus.

OPENCAST COAL

During the war the Ministry acted as the agent of the Ministry of Fuel and Power in engaging civil engineering contractors and machinery to obtain opencast coal. Although the mining of opencast coal is now carried out by the National Coal Board, the Ministry still acts as the agent of the Ministry of Fuel and Power in the exercise of the emergency powers governing the land transactions involved. These include arrangements for entry on land for prospecting, requisitioning land for actual mining, negotiating compensation settlements, and finally derequisitioning the land when it has been restored by the County Agricultural Executive Committees. The cost of the Ministry's operations is met by the Ministry of Fuel and Power who have their own accounting arrangements with the National Coal Board. Over a period of twelve years some 80,000 acres, involving some 30,000 compensation claims, have been requisitioned under emergency powers for this purpose; a little over half of this land is still held, most of which is now in the course of being restored to agricultural use.

SERVICES IN NORTHERN IRELAND

The Ministry of Works is responsible for providing accommodation in Northern Ireland for the United Kingdom Departments carrying on services there. These Departments include the Customs, the Inland Revenue and the coastguard service. Expenditure on this accommodation is carried on the Ministry's Vote for public buildings in the United Kingdom, but some of it is eventually recovered from Northern Ireland.

The Ministry of Works has no organisation of its own in Northern Ireland and the works organisation of the Government of Northern Ireland is a part of the Ministry of Finance. The Ministry of Finance therefore acts as the Ministry's agent in the provision of accommodation there for United Kingdom Departments. In 1955 the Ministry of Works assumed responsibility for Government House, Hillsborough, the residence of the Governor.

GENERAL

The above is a very brief account of only a few items in an extensive programme of work which covers the design and erection of buildings, the acquisition and adaptation of existing properties, their equipment

and maintenance, and their management. The illustrations given serve to show that the Department is called upon to undertake construction work of every kind from the most skilled to the commonplace, and in discharging their tasks the staff of the Ministry acquire at least an acquaintance with the policies and problems of many other Departments, especially where specialised buildings are needed to carry out their work. Often the Ministry has the thankless job of taking over remnants from other Departments or of acting as their agents in such matters as compensation to owners of property. All the operations call for team work of a high order between administrative officers and professional, executive and technical staff in many divisions, at headquarters and in the regions.

CHAPTER V

Accommodation Overseas

The nature of the service — Accommodation
provided — The building programme —
Standards.

*

THE NATURE OF THE SERVICE

THE Ministry provides accommodation for diplomatic and consular missions in foreign countries, for High Commissioners, for Trade Commissioners, for certain representatives of the Colonial Office and of other Departments, and for permanent delegations, such as those to the United Nations and N.A.T.O. The work is similar to that carried on in the United Kingdom but different problems arise, due to differences in local conditions, climate and traditions. Embassies and High Commissioners' residences have in fact to fulfil two purposes; they must be equipped to support the occupant in carrying out his duties, and still have the amenities of a private house. If a new building is being designed it should conform to British standards of architecture yet be in harmony with local surroundings. The special features of this overseas service make it one of the most interesting of the Ministry's functions as well as one of the most difficult to administer.

The Ministry first became responsible for diplomatic and consular accommodation in 1874, though it had been called upon earlier for services in connection with the Paris and Madrid embassies. High Commissioners' residences were added in 1929. The Ministry now possesses some 200 freehold and 300 leasehold properties abroad, even though it does not provide all the accommodation required by Departments with interests overseas who obtain by hiring most of the residential accommodation and a small part of the offices required by their staff. About two-thirds of the Ministry's overseas expenditure is for the Foreign Office, one-fifth for the Commonwealth Relations Office and the remainder for other Departments.

In general the Ministry provides and maintains the residences of heads of missions, while the employing Department is responsible for the housing accommodation of the other staff. Where the employing Department is responsible the Ministry's services are generally limited

to technical advice. In certain cases, however, the Ministry builds, buys or hires dwellings for staff other than the head of mission. The need for this arises most frequently in places (mainly in tropical and in less developed countries) where hiring is impossible or uneconomic, or it is difficult for staff to negotiate their own tenancies.

The Ministry is responsible also for providing and equipping offices at oversea posts. Exceptions are few and are limited to short-term tenancies or to very small posts where the officer in charge has his office in his own house.

ACCOMMODATION PROVIDED

Before the Ministry took over the provision of accommodation it was customary for the head of mission to rent a suitable house at the cost of the expenses allowance which he received from the Foreign Office. In Western Europe some rented houses were eventually bought by the Ministry. As a result of the great changes in countries and capitals of the world in the last fifty years, many buildings that once served their purpose well are now unsuitable. The importance of some posts has increased; new posts have been created to serve countries which have newly gained their independence. Great changes have also come over the Foreign Service. In the old days many heads of missions had large private fortunes and family possessions which they could draw upon when furnishing their residences instead of relying on Government furnishings. The staff they controlled was small and the range of their duties was limited. Now that the Diplomatic, Commercial and Consular Services have been amalgamated in a single Foreign Service, the basis of recruitment has been broadened and heads of missions are usually found by promotion from within the service. The size of staffs and the range of their duties have both greatly increased. To enable the new Service to represent their country effectively, the State must now provide adequate and fully equipped residences and offices, and this has considerably increased the demands on the Ministry of Works. There have been comparable changes in the need for accommodation for High Commissioners, whose position and requirements are the same as those of Ambassadors.

Requirements are met wherever possible by leasing or purchasing existing accommodation instead of erecting new buildings. But it is often too costly to extend or adapt existing accommodation and, even in Western Europe, the only solution may be to acquire a site and erect a Crown building of design and capacity suited to long-term requirements. An example of a major scheme to meet a new requirement is the construction of a compound for the Political Resident in the Persian Gulf and his staff at Bahrein. The need for this arose from

a decision by the Government to transfer the headquarters of the Political Resident from the Persian to the Arab side of the Gulf.

THE BUILDING PROGRAMME

The first fully air conditioned residence has recently been built in Colombo for the High Commissioner. The furniture for the residence was specially designed and has aroused great interest both locally and in this country. In Indonesia, where formerly our principal representative was the Consul General at Batavia (now Djakarta), the Ministry is planning to build new offices for what is now an important embassy. At Karachi the Ministry has bought an estate for the construction of a diplomatic compound and one of the houses on it has been converted into a residence for the High Commissioner. At Bonn in the West German Federal Republic a house was bought in 1952 as the residence for the then High Commissioner (now Ambassador) and the Ministry has also had to build offices in what was once a comparatively small provincial town and has become since the war the capital of a leading European state.

The most important of all the Ministry's current schemes for building in a new capital is the major project at New Delhi, where a diplomatic compound is to be built in the area set aside by the Government of India for development as a diplomatic enclave. This will accommodate the High Commissioner and his senior staff and include offices for the whole mission. The scheme, which is expected to start in 1955 with the construction of quarters for junior staff and services for the whole compound, will be spread over a number of years and will undoubtedly rank as one of the Ministry's most important diplomatic properties.

The Ministry has in the last ten years undertaken few major schemes in established capitals. Notable exceptions are the purchase and adaptation of Pereire House, Paris, for the offices of our embassy and the construction of an embassy residence in Rio de Janeiro, Brazil. Pereire House was an eighteenth century mansion adjoining the embassy residence and its acquisition was made necessary because of the expansion in the size of the embassy since before the war. Extensive adaptations were required to convert it to office use. The original plan to build a residence at Rio de Janeiro dates back to the inter-war years and it was the first major scheme undertaken by the Ministry after the war. The residence has been the subject of much comment on account of its size and cost. Rio was a post where it was held that for reasons of policy the United Kingdom Ambassador should have an imposing residence, and the building is on a grand scale in contrast to the generally more austere standards of the post-war period.

STANDARDS

The diversity of requirements and local conditions make it undesirable to have fixed standards of accommodation for overseas buildings; each new building has to be planned to a considerable extent to meet the requirements of the particular post. All that can be done is to give general guidance on standards. This subject has been carefully studied from time to time and it is present policy for instance to place the residence of the Ambassador in the best residential quarters, and to concentrate the offices of the mission in a single building as near as possible to the centres of government and commerce. In some posts it is an advantage still to have house and office combined and in any event provision is made in the residence for dealing with business. The garden is designed by the architect for official entertainment as well as private pleasure; it will often contain tennis courts; more rarely a swimming pool or squash court. Much depends upon the local custom and climate and on what other means of entertainment and recreation are available. A single office block will normally accommodate all the staff and in important missions provide a conference room equipped for film projection, a small cafeteria, and sometimes a flat for a resident clerk, a security officer or a caretaker. Special attention must also be given to the general security arrangements.

Consulates vary greatly in size, functions and situation; the more important of them, as for instance those in the capitals of foreign colonial territories, should be permanent, dignified and somewhat on the lines of small legations. They are, if possible, rented on a long lease, but otherwise they may have to be purchased or built.

The Ministry takes care of interior and exterior maintenance of all premises it provides, including the upkeep of the gardens of compounds and offices and the operation of mechanical equipment such as generating plant and lifts. The private gardens of residences are usually maintained by the Ministry only when the residences are unoccupied. The Ministry supplies and looks after air conditioning equipment where the climate makes it necessary. The running expenses of residential accommodation—the cost of fuel, water and electricity—are borne by the occupant; for office premises the Ministry meets the cost.

The furnishing of embassies and other residences is no less important than their building; the furniture must harmonise with the building and must include pieces of distinction. For buildings of traditional style, such as the Washington Embassy designed by Lutyens or the older European embassies such as Paris and Rome, period furniture of some merit is obtained for the principal rooms and the Ambassador's study where he receives important callers. In

the case of newly constructed buildings much care is given to the design of furniture in relation to the building as a whole and to the selection of furnishings, china, glass, etc., of the highest quality. The Ministry's purchases give British manufacturers an opportunity of displaying their best products under the most favourable conditions. There are similar though simpler scales of furniture and equipment for less important posts; these scales take account of the rank of the officer concerned, the functions of the building, and climatic and social conditions of the country.

There is also the special problem of supply of plate and pictures, and works of art. Before 1815 a service of plate, including communion plate, was presented to Ambassadors on taking up their mission and was retained by them on retirement. The system of issuing plate as normal equipment of the principal major missions was then adopted and the dozen or so complete services still extant date from the early years of the nineteenth century; those at Berlin and Warsaw were lost in the war. Formerly ambassadors provided their own pictures, but the Ministry has now taken over this responsibility for the most part. Exceptionally, original paintings may also be provided for the more important consular residences. Offices usually have to be content with reproductions. A few pictures are lent to the major missions from the collections of the National and Tate Galleries. The Ministry is authorised by the Treasury to purchase pictures for overseas buildings within a fixed annual limit. Royal portraits, usually copies of original State portraits exhibited at the Royal Academy, are supplied to major missions; the less important posts are provided with reproductions.

The occupant of an official house is responsible for the care and safe custody of its contents and for an annual checking of the inventory. He has to make good avoidable loss and damage. Special precautions are taken in the care of pictures, plate and other valuables. The Ministry is responsible for seeing that the contents of the house are properly maintained and for replacement not due to negligence.

CHAPTER VI

Furniture and Supplies

Furniture and other equipment — Removals,
maintenance, cleaning and disposal — Fuel —
Provisioning and stores — Organisation.

*

THE Ministry of Works supplies to all other Civil Departments practically all the loose equipment used by them, other than stationery and office machinery. The Service Departments also obtain, through the Ministry, a great deal of their requirements of other than 'warlike stores'. The cost of all this supply work was about £22,000,000 in 1954-55.

The present duties of the Supplies Division date from 1828 when the Treasury, following the recommendations of a Committee of Enquiry, directed that the Office of Works should become responsible for the furnishing of all public offices, the law courts and official residences not on the Civil List, and gave instructions for the conduct of the work involved. Annual inventories were to be prepared and checked, and special authority obtained for the supply of articles outside a certain range; articles of furniture were to be 'plain and substantial', and no expensive woods were to be used or expensive curtains supplied. Directions were also given about the storage and sale of surplus furniture.

There was little extension of the work of the Division during the nineteenth century. During the 1914-18 war the Supplies Division extended its services to many other types of goods and after the war the Treasury encouraged other Departments to use the central purchasing services of the Ministry more extensively. By 1938 practically all Government furniture and similar articles were supplied by the Ministry; the only important exceptions were special furniture required by the Admiralty, the Air Ministry and the War Office. When the Auxiliary Fire Service was launched in the second World War the Supplies Division of the Ministry had to obtain vast quantities of pumps, hose and other fire fighting equipment required by the Home Office. Subsequently other services on a national scale were undertaken, such as canteen equipment (first for the Ministry of Food emergency feeding requirements and then for school meal schemes).

FURNITURE AND OTHER EQUIPMENT

In the Civil Service staff are classified into grades common to the whole Service, and standards of space and working conditions are laid down according to the status and functions of each grade. This leads to common designs and standards of furniture for general office workers and for other large blocks of Government staff engaged on specialised work in offices like tax offices or the Post Office Savings Bank, or in research laboratories. Apart from the considerable savings in cost which result from large scale production of a restricted range of designs, standardisation of furniture helps to ensure orderliness in offices; it also makes it possible to move furniture from one office building to another without worrying about its suitability. Standardisation need not result in monotony or inferior quality, provided the design shows some imagination, and it has been the aim of the Department to encourage co-operation between first-class designers and efficiency experts in developing furniture and equipment for particular groups of staff. Experience shows that the resulting product contributes towards increased efficiency by better working conditions, and to economy.

The Supplies Division includes technical staff recruited from the furniture industry and allied trades who have a wide knowledge of furniture design, of the technique of construction in wood and steel, of upholstery, and of allied services. They prepare specifications, inspect orders in the course of manufacture, and devise furnishing schemes in consultation with architects and engineers. They keep abreast of current trends by consultation with the Timber Development Association and the Forest Products Research Laboratory and by visits to furniture manufacturers. They also collaborate with the Council of Industrial Design and with individual designers on special problems. The standards adopted in recent years aim at light gay colours and simple designs, which will form a unity throughout the range of articles supplied. A Government office today which is equipped with new furniture is very different from the old style. Most of the wood furniture is now finished in its light natural colour and not stained; table and desk tops are usually in various light colours, with a matt finish to prevent glare.

Jokes are often made about the practice in the Civil Service of supplying or withholding a carpet according to the rank of the occupant of the room, but it is an example of the need to have a rule which everyone in the Service understands. It is not so well known that linoleum, the normal alternative to carpets, is supplied in three thicknesses which vary not according to the rank of the occupier of the room, but according to the length of time the building is likely to be occupied. In this way the taxpayer's money is spent economically.

But the replacement of old furniture is a long process. The existing furniture of the Civil Service is a very mixed lot and most of it still consists of the solid pre-war standard designs. There are still remnants of the Victorian and Edwardian days, and there are quantities of emergency furniture, such as deal folding tables and chairs, with which the wartime expansion of the Civil Service was met cheaply and quickly. Owing to the great number of Government buildings and the constant movement of furniture between them, no inventories are kept either of the total quantity of furniture of various sorts belonging to the Ministry or of the contents of each building. The furniture issued remains the property of the Ministry and its proper maintenance and distribution is the responsibility of the Ministry's supplies officer dealing with the building concerned. He in turn relies on the co-operation of the accommodation officers of the occupying Departments and of the staff using the building. The Ministry's total expenditure in Great Britain on new furniture in 1954-55 was £2,500,000. Part only of this sum was spent on office furniture. The balance covered the cost of racking for repositories and stores, showcases and fittings for museums and art galleries, materials for training centres, first aid equipment, canteen furniture and equipment, and special furnishings for post offices, prisons, etc.

It is impossible to say precisely how much old furniture needs replacement. New furniture is expensive and, to get the best benefit from it, is used when a new building is being furnished or where an old building is being redecorated and refurnished throughout. It will be a long time before all the old furniture is replaced.

Very different problems are met with in the furnishing and equipment of Palaces and official residences. The furnishings in residences occupied by the Royal Family, such as Buckingham Palace and Windsor Castle, are looked after by the Lord Chamberlain. Nor is the Ministry concerned with the furnishing of the private Royal residences. The Ministry is, however, responsible for the maintenance of the furniture in the state rooms of St. James's Palace to the requirements of the Lord Chamberlain, and of the historic furniture and tapestries of Hampton Court Palace, Kensington Palace, Kew Palace and the Palace of Holyroodhouse. It is also responsible for the furnishing of the Houses of Parliament and the official residences of the Lord Chancellor, the Speaker, the Sergeant at Arms and the Lord Great Chamberlain's Secretary. The official residences at No. 10 and No. 11 Downing Street and at Carlton Gardens are completely furnished and equipped by the Ministry. Two other fine buildings in London whose furniture needs special attention are Admiralty House and Lancaster House. Furniture is supplied and maintained for 90 residences belonging to the War Office and the Air Ministry, at home

and overseas, for the use of Commanding Officers. Finally the Ministry completely furnishes and equips embassies, legations and High Commissioners' offices and other premises overseas as described earlier.

Another specialised service is the furnishing of the national museums and galleries. The former require specially made showcases, bookcases, readers' desks, bookstall fittings and poster stands. In addition to the rooms open to the public, rooms are also equipped for the storage of specimens available to students for study and research, as for example at the Natural History Museum where the cases for storing require especially fine workmanship and careful design.

Laboratory fittings and equipment are provided for the scientific and research laboratories of the Department of Scientific and Industrial Research and the Ministry of Supply, and once the layout of the laboratories and workrooms has been agreed, the Supplies Division assumes full responsibility, in consultation with the scientists, for the design, production and installation of all fittings and equipment.

Less specialised but even more extensive services covering the whole country are the complete furnishing and equipping of hostels and married quarters, airports, stores, factories, hospitals, Borstal institutions, detention centres and prisons, Court rooms and a host of other buildings.

The Supplies Division has a big part to play in ceremonial duties and its services are required in connection with many state or public occasions and ceremonies. On the occasion of the 1953 Coronation the Supplies Division was responsible for the furnishings in Westminster Abbey and the decorative materials used on stands and on the route. The Division also organised refreshment buffets for the 7,000 persons visiting the ceremony in the Abbey as the guests of the Queen, and the refreshments for seat holders in the Government stands on the route.

The Division acts as agent for other Government Departments and for grant aided bodies in whose economical administration the Exchequer has a predominant interest, such as the British Council. In these cases the service given is subject to the condition that the supplies made must be without prejudice to the prior claims of the Ministry's own services and the goods must be of a quality and kind normally supplied. The range of articles supplied was greatly extended during the war when, because of scarcities of every description, it was decided to purchase centrally and to store almost every kind of article for a greatly increased number of customers. The return to normal conditions has made great reductions possible. Nevertheless the Ministry's catalogue still runs to seven volumes, and the articles range

from razor blades for men prisoners to toilet soap for babies, and from electric lamps, tools, and radios to surgical equipment and first aid kits; in fact it includes most things which might be bought at a large retail store and many things which could not.

REMOVALS, MAINTENANCE, CLEANING AND DISPOSAL

There are several necessary but routine services which the Department carries out in its role as housekeeper. The removal of furniture and records is usually done by contract, though the Ministry has some vehicles of its own and carries out small removals itself. In London, Edinburgh and Cardiff the Ministry has its own workshops to deal with minor repairs of furniture. There is a clock workshop in London, which maintains clocks and time recorders and sends round clock winders to attend to hand wound clocks where they are still in use. There is also a window blind and upholstery workshop which makes up and maintains blinds, loose covers, curtains, etc., and a carpet workshop for repairs to machine made carpets and felts.

As a general rule the Departments which occupy or use the Ministry's property are responsible for cleaning it, and the Ministry merely acts as a general adviser and supplies cleaning materials and equipment. In the Whitehall area the Supplies Division is responsible for cleaning services for parts of the Houses of Parliament and for buildings jointly occupied by more than one Department. Also it is the Ministry's cleaning staff which has to meet exceptional demands due, for example, to international conferences in London. When Westminster Abbey had to be cleaned for the Coronation, despite constant interruptions by other work, it was the Supplies Division which had to make the arrangements.

Another responsibility of the Supplies Division is the disposal of surplus stores belonging to the Ministry. Surplus goods are normally sold by competitive tender, or by public auction where articles of popular consumption are sold in small lots to cater for private individuals as well as large scale dealers.

FUEL

Another service which is not always easy to run smoothly is the supply of fuel for buildings. In 1954-55 approximately £4,000,000 was spent on this service. A small technical staff advises on such matters as the purchase, distribution and use of fuel, in co-operation with the Ministry of Fuel and Power. The Ministry's engineers are responsible for the efficiency of fuel consuming apparatus. The Ministry submits annual schedules of requirements and receives allocations of fuel under the Ministry of Fuel and Power's non-

industrial fuel programme. Each Government building throughout the country is given an allowance based on its size and the type of plant and appliances in use, and it is the task of the Supplies Division to see that supplies do not exceed the allowance without complete justification.

Fuel is purchased by competitive tender though, as prices are controlled, the element of competition lies only in the distribution and profit charges. The normal source of supply is from coal merchants and distributors, but in London a small proportion of the total supplies is made through depots run by the Ministry. This enables urgent requirements to be met and ensures continuity of supplies. In the provinces it is sometimes worth while to purchase direct from the pit and distribute to cellars and bunkers by haulage contractors from sidings in the town concerned. In London supplies of fuel are ordered as needed by the occupants of buildings from the ordering section of the Supplies Division, which arranges for delivery, thus retaining full control of both records and supplies throughout. In the provinces a similar system would result in delay, so the occupants themselves order within the limits of their allocation direct from the merchants holding contracts from the Ministry. The aim is to take delivery at each building by the end of October of the maximum stock for which storage capacity exists, and thereafter to balance consumption with replenishment in such a way that a minimum stock is carried over beyond the end of the heating season in the following April. The scarcity of fuel, the limited funds available and, in towns, the low storage capacity of buildings, combine to prevent substantial stocks from being carried, and the balancing of estimate with expenditure tends to be a difficult matter. The end of the financial year is earlier than the end of the heating season and the combination of a mild autumn with a cold snap in the spring can play havoc with estimates of the financial out-turn.

PROVISIONING AND STORES

The control of purchases on this vast scale is a highly expert business. Decisions have to be taken by purchasing sections as to the timing and quantities of purchases according to the stocks held in store, the rate of issue, the number of outstanding demands, and the balances available on existing contracts. Then there is the question of ensuring quality. Wherever practicable goods are inspected while in course of production, but where inspection at works is impracticable, contract samples have to be checked with deliveries.

Considerable contracting powers are held by the purchasing sections of the Supplies Division. Contracts are normally let for a specific quantity of goods at a firm price by competition within an

approved list of manufacturers of satisfactory standing. Where the goods are of normal trade pattern the contract may be on the basis of supplying goods as they are ordered over a fixed period of time. The purchasing sections are responsible within certain financial limits for the whole contracting process, including the preparation and issue of invitations to tender, consideration and acceptance of tenders, and supervision and progressing of contracts. They also co-ordinate the Ministry's practice and specifications with those of other Departments. Ordering sections, allied to and under the control of the purchasing sections, are responsible for placing orders on contractors for supply against contracts and for placing demands on Ministry of Works stores for issues of goods from stock.

The contractor is normally responsible for delivery, and goods are delivered direct to users wherever possible. In many cases, however, the quantity required by the particular user is below that which a manufacturer can be expected to deliver; in other cases the need is so urgent that action must be taken at once. Stores are therefore maintained by the Ministry mainly for the purpose of having a ready source of supply in cases where direct delivery is impracticable. During periods of shortage and production difficulties, when manufacturers cannot hold stocks from which to supply goods on demand, the stores have to function on a larger scale. During the war very large and varied stocks were held in 180 stores up and down the country, but by 1955 the number of stores had been reduced to under 50. There is a mechanised system of record and stocks, and issues and forward programmes for the whole country are centrally controlled. Stocks are checked and valued annually.

ORGANISATION

The activities of the Division which are of greatest interest from the point of view of organisation are those of the purchasing and stores branches. The Treasury is the central Department for purchasing policy and administration, and controls the activities of three central purchasing agencies, the Ministry of Works, the Stationery Office and the Ministry of Supply. The Post Office and the Ministry of Health also purchase telecommunications equipment and medical supplies respectively for all other Government users. Centralised purchase has many advantages, such as standardisation, reduction of prices resulting from larger purchases and the elimination of interdepartmental competition, economies in purchasing staff, the possibility of allocating scarce goods to users in accordance with need, the availability to all users of the experience of a specialised buying organisation, and better supervision of Government funds. Any disadvantages which the system may have are usually the result of its

improper or excessive application. Standardisation must not be pushed too far, proper attention must be paid to users' requirements, and the system must be efficiently organised and kept under constant review. The purchasing agent must constantly keep in mind that he is the servant of the user; he must decentralise and make procedures as simple as possible and not apply them automatically to all classes of goods.

The detailed machinery for stock control and provisioning of a national organisation with an expenditure of about £22,000,000 per annum, handling a range of 12,000 articles, and making some 350,000 issues from store to a value of about £2,500,000 per annum, is of course a matter of great complexity. It is important to maintain a correct provisioning policy so as to strike a mean between overstocking, which ties up capital and increases unproductive storage charges, and short term hand-to-mouth buying in small quantities, which increases costs and runs the risk of delay in supply. Owing to the Parliamentary system of control of finance, these processes are more difficult than in industry and commerce. The Ministry does not keep to a single financial procedure. Where it is in a position to control the demands of users for standard supplies, e.g., of office furniture to Civil Departments, the cost is borne by the Ministry of Works and there is no recovery from the user Department. This practice avoids interdepartmental accounting and the duplication of records. It also gives the Ministry a stricter control over expenditure, facilitates standardisation and secures fair distribution. On the other hand, where the Ministry is not in a position to control demands, as for instance where it contributes a few items only as part of a large programme, or where the articles supplied are to be used in premises and under conditions outside the Ministry's control, the Ministry recovers the cost both of the goods supplied and of its own expenses. In practice the cost of supplies which is recovered from other Departments is more than twice the expenditure on supplies for which the Ministry is directly responsible.

PART THREE

The Heritage of the Past

CHAPTER VII

Royal Parks and Gardens, Palaces, Osborne, Ceremonial

Royal Parks and Gardens — General policy and
aims — The Royal Botanic Garden, Edinburgh
— The Royal Botanic Gardens, Kew — Palaces
— Osborne House — Ceremonial.

*

WE now turn to that part of the Ministry's work which has the longest history and is also the most colourful in character. It includes the management of the Royal Parks, the upkeep of the Royal Palaces, the organisation of ceremonial, the care of the Houses of Parliament, the erection and upkeep of statues of national importance, the maintenance of the buildings of the national art galleries and museums, and the care of pictures and tapestries in historic and public buildings. Though expenditure on these services is small by comparison with other work of the Ministry, the questions involved are often difficult. Whatever is done attracts public attention and frequently the interest of important personages is closely engaged. The staff engaged on this work need to have a sense of continuity with the work of their predecessors and it is not out of place in this chapter to refer briefly to the history of the buildings and estates in the Ministry's care.

ROYAL PARKS AND GARDENS

The Royal Parks originated for the most part as gardens or hunting grounds attached to various palaces; several were first enclosed by Henry VIII. In the days of Charles I some of the Parks were opened to the public. Cromwell closed and sold considerable areas, but they were mostly bought back at the Restoration. They were progressively handed over to the Commissioners of Woods, Forests and Land Revenues. In 1851 the Commissioners of Works took over the management of the Royal Parks (with the exception of Windsor Great Park and the Old Deer Park, Richmond), and certain other parts of the Crown Lands such as Hampton Court Gardens. A relic of the former status of many of the Parks as Royal hunting grounds long persisted in the Royal appointment of Deputy Ranger

of Hyde, St. James's and the Green Parks, Greenwich Park and Richmond Park.

The Crown Lands Act, 1851, directed that the Commissioners of Works should exercise all the powers and carry out all the duties previously vested in the Commissioners of Woods. Those powers and duties were not clearly defined, and the position is really governed by later legislation, that is to say the Parks Regulations Acts, 1872 and 1926, and the regulations for individual parks made under these Acts. The Ministry has powers of management only, and any concessions granted to the public must therefore be by licence of the Crown. The Ministry's general responsibility is to maintain the Parks as open spaces and pleasure gardens for the peaceable enjoyment of the public.

Twelve Royal Parks are now managed by the Ministry, ten in or near London and two in Scotland, comprising altogether about 6,000 and 750 acres respectively. Each Park has its own distinctive characteristics which are carefully preserved. The four central Royal Parks in London—Hyde Park, Kensington Gardens, St. James's Park and the Green Park—are perhaps the best known. In view of the wide public interest in the Royal Parks, the Ministry has invited Richard Church to describe their history and associations and a booklet will be published separately. It is sufficient here to refer briefly to their origins.

After being sold by Cromwell, *Hyde Park* was restored to the Crown at the Restoration. In 1730–33 Queen Caroline formed the Serpentine from a chain of ponds which had been made in the reign of King William III by damming the Westbourne Brook or the Bayswater. The brook was eventually severed from the Serpentine in 1860, and the present complicated water supply system was installed, fed from wells in St. James's Park and pumped through the Serpentine, the Round Pond, and the lakes in Buckingham Palace grounds and St. James's Park.

Kensington Gardens are an extension from the gardens of Kensington Palace. Queen Anne added to the grounds and Queen Caroline took in 200 acres from Hyde Park. They were laid out in much their present form to Queen Caroline's directions. A further 30 acres round the Albert Memorial were added in 1870.

St. James's Park was formed partly from the gardens of York Place, a house belonging to Cardinal Wolsey which was incorporated by Henry VIII in his Palace of Whitehall. The remainder of the Park and the whole of Green Park were taken from the grounds of St. James's Hospital which later became St. James's Palace. The Park was first laid out as a garden in the French or Dutch style of the late seventeenth century, with a canal formed down the middle from the

River Tyburn. The Park was redesigned by John Nash in the reign of King George IV.

Regents Park was formerly known as Marylebone Park. Cromwell sold the timber and deer, after reserving 3,000 tons of the former for the Navy, and assigned the Park as security for the pay of Harrison's Dragoons. When the Crown resumed possession, the ground was let as small holdings and farms until the leases fell in at the beginning of the nineteenth century. The Park owes its present form also to John Nash. The houses in the Terraces, which are managed by the Commissioners of Crown Lands, were let on 99 year leases between 1822 and 1826 and many further enclosures were permitted, including, in 1829, the enclosure of over 30 acres to form the grounds of the Zoological Society of London. The public were admitted to parts of the Park in 1835. When the Crown Lands Act, 1851, was passed considerable areas of the Park were leased to private individuals and these were expressly excluded from the Ministry's control. In recent years it has been the Department's policy to restore these areas to the Park wherever possible as leases fall in, but a number of enclosures such as those occupied by Bedford College and the Zoological Society are likely to remain.

Primrose Hill is a small park of 82 acres, which is separated from Regents Park by a canal and a road, but the two are managed together. The Hill was bought by the Crown from Eton College in the reign of Queen Victoria. In or before the reign of Edward I the citizens of London had given this area to the newly founded St. James's Hospital, the charge of which was committed by Henry VI to Eton College, and when the Hospital and its other property were confiscated by Henry VIII to form St. James's Park and Palace, Eton College had been allowed to retain Primrose Hill.

Of the outer Parks, *Greenwich Park* was originally attached to the Tudor Palace of Placentia which later became the site of the Royal Hospital, built by Wren and now the Royal Naval College. The park was opened to the public in 1825.

Hampton Court Park contains the 'Long Water', a seventeenth-century canal, similar to that formerly existing in St. James's Park and bordered by lime avenues forming a vista in front of the seventeenth-century face of the Palace.

Bushy Park is best known for its chestnut avenue said to have been planted at the suggestion of Wren.

Richmond Park is the largest Royal Park (2,300 acres). It was formed by Charles I in 1637, and was attached to the Royal Palace which stood between Richmond Green and the Thames from the reign of Edward I to that of George III. The Old Deer Park, between the site of this Palace and Kew Gardens, is administered by the

Commissioners of Crown Lands. Richmond Park is preserved so far as possible without buildings, and motor traffic is restricted to roads round the edge of the Park; it is one of the largest open spaces near London where natural beauty and wild life can be enjoyed.

A check has to be kept on the number of deer in Richmond, Hampton Court and Bushy Parks and this makes it possible to keep up a pleasant custom which has been followed without interruption—even in years of war—for many generations. Each Monarch authorises the Minister of Works to issue warrants for the delivery of one quarter of a doe to persons named on a list which accompanies the Royal Warrant. In addition to Ministers of the Crown the list includes the Grand Falconer of England, certain officers of the Royal Household, the Archbishops of Canterbury and York, the Speaker of the House of Commons, the Lord Chief Justice, the Master of the Rolls, the Governor of the Bank of England, the Lord Mayor of London and the Comptroller and Auditor General. A second list authorises delivery to other persons 'in the event of a sufficiency of does of this season'; this list includes Permanent Under Secretaries of State, Sheriffs and officers of the City of London and the Mayor of Kingston-upon-Thames. This privilege is greatly prized by the recipients, in spite of the charge fixed by an observant Treasury.

In Scotland, the principal Royal Park is that of *Holyrood* adjoining the Palace of Holyroodhouse in Edinburgh and containing the imposing rocky eminence of Arthur's Seat, and St. Margaret's and Duddingston Lochs. The Park was originally granted by Charles I to Sir James Hamilton and his heirs, as Hereditary Keeper, with all fees, duties and privileges pertaining to this office, but eventually the office was bought back by the Commissioners of Woods in 1844, in order to prevent the working of quarries in the Park. The other Scottish Royal Park is the grounds of *Linlithgow Peel* and the loch adjoining the ruins of the ancient Palace.

GENERAL POLICY AND AIMS

With the growth of London and the increasing pressure of modern life there is greater appreciation than ever of the quiet and natural beauty of the Parks; they are also greatly admired by visitors to London, including tourists from abroad. The Ministry's aim has always been to preserve the character of the Parks and to refuse any concessions which would conflict with their enjoyment by the general community as open spaces and pleasure gardens. Successive Ministers and Governments have followed the same policy and this is fortunate because rapid changes cannot be made nor is it desirable to attempt them. In general the policy has had the support and co-operation of the public. In pursuance of this policy many of the encroachments

which occurred in the past have been restored and in the central parks very few are left. The outer parks, however, have not yet reached this state and in Bushy and Richmond Parks especially there are still areas with military camps, though it is hoped that these will eventually be restored to park use. In some parks concessions were also granted many years ago to private sports clubs, but these are now being ended as the opportunity occurs. Commercial concessions are only granted so far as they serve the public interest and are consistent with the amenity of the parks as places of recreation and relaxation: thus private contractors let out chairs and run restaurants and sell refreshments in buildings designed and erected by the Ministry. Planning legislation has long made it obligatory to consult the Ministry of Works about all development proposals within half a mile of the Royal Parks, and undesirable development—such as new advertising signs or buildings of excessive height—is to some extent controlled by the Ministry, though the co-operation of local planning authorities is necessary to ensure that this control is effective.

Considerable damage was done during the war, but most derelict areas have been restored. The parks also suffered from neglect under war conditions and this extended to the trees and shrubberies. Many of the trees were planted in the eighteenth or early nineteenth century, and the question of their treatment or replacement has given rise to a serious and urgent problem, particularly where there are avenues of trees, as at the Broad Walk, Kensington Gardens. The whole subject has now been examined by an Advisory Committee on Forestry which has made a general review of problems affecting all the parks as well as surveys of each park. The treatment of dangerous or decayed trees and the planned supply and planting of trees for succession are being arranged in accordance with the recommendations of the Committee, but there is serious difficulty in obtaining skilled labour in the London area for work of this kind.

Care is taken to preserve wild birds throughout all the parks. A number of plantations, especially in Richmond Park—where there has long been one of the few heronries near London—have been reserved as bird sanctuaries. The Ministry is advised by a Committee of ornithologists on the best way of attracting and preserving wild birds; voluntary bird observers are appointed for all parks and a report is published biennially. There is a similar committee in Scotland, where a bird sanctuary has been established at Duddingston Loch in Holyrood Park. A collection of waterfowl is maintained in St. James's Park, where pelicans have been kept since Stuart days. A birdkeeper is appointed for the care of birds in St. James's Park, Kensington Gardens and Hyde Park.

It was George Lansbury, First Commissioner from 1929 to 1931, who increased recreational facilities in the parks; he introduced children's playgrounds and the well known Lansbury Lido in Hyde Park, where there is a memorial plaque in his honour. Games of all kinds can now be played in most parks and these facilities are gradually being extended in suitable areas.

The Minister has made regulations controlling the use of each park by the public, and within the parks the park keepers have authority equivalent to that of police constables, including, in certain circumstances, the power of arrest. In Hyde Park the police act on behalf of the Ministry. The regulations are kept to a minimum and are in course of being simplified. Such prosecutions as are taken are mostly for traffic offences or for litter. Litter is one of the most troublesome problems and a special anti-litter campaign has been undertaken on the advice of a Committee of independent persons whose report was published in 1955.

As with so many other services of the Ministry the Royal Parks call for co-operation between various Divisions. An administrative section is responsible for general policy and for decisions affecting amenities, finance and questions arising on the regulations. The Bailiff of the Royal Parks gives operational effect to the decisions. He is generally responsible for management and for co-ordination of the work of the Superintendents. A Superintendent is in charge of each park or group of parks and is responsible to the Bailiff for maintenance of his park, treatment of trees, detailed horticultural work and the application of the regulations. The various works, supplies and transport services of the Ministry also operate in the parks as required. There is one Superintendent for the central parks who also looks after the Victoria Tower Gardens, Parliament Square, Grosvenor Square Gardens and the window boxes in Whitehall. The Superintendent of Richmond Park is a qualified forester and all the Superintendents have horticultural qualifications. The Superintendents also supervise the park keepers and the industrial staff who carry out maintenance work, including surfacing of roads, as well as normal horticultural work. In the outer parks there are gamekeepers to look after the deer and to keep down vermin. In Scotland the Royal Parks and the Royal Botanic Garden are under the separate management and control of the Scottish Headquarters Office in Edinburgh.

The Bailiff also supervises the maintenance of the grounds of a number of Palaces, and of Osborne House in the Isle of Wight. He advises or looks after the gardens of other buildings in the Ministry's charge, e.g., the seventeenth-century garden at Kirby Hall, an ancient monument in the Midlands, and he is responsible for Brompton Cemetery.

The Royal Parks and Gardens cost nearly £700,000 a year to administer; annual receipts amount to about £60,000.

THE ROYAL BOTANIC GARDEN, EDINBURGH

Reference may be made here to one of the Ministry's most important charges in Scotland, the Royal Botanic Garden (and Arboretum) in Edinburgh (60 acres). A botanic garden has existed in Edinburgh since about 1670, then and for many years being known as the 'Physick Garden' of the University, situated near the base of the Calton Hill. The present garden—at Inverleith—was formed in 1824 at the cost partly of the Crown and partly of Parliamentary Votes. The Arboretum was acquired by Edinburgh Corporation in 1877 and handed over to the Government as an addition to the garden, on the understanding that it would be 'maintained as a public park for all time coming under the Parks Regulation Act'. This garden is not, strictly speaking, a Royal Park and, although it is in many respects similar to the English institution at Kew, it is primarily an educational and training establishment. Equipped with modern laboratories and an excellent botanical library, the garden offers the fullest opportunities for training and research to students seeking university honours in botany as well as to those who are pursuing the more practical applications of the science. The garden also provides a three year training course for young gardeners and foresters who may qualify for the Diploma in Horticulture of the Royal Botanic Garden. The general policy has always been to unite the purely scientific with the more practical aspects of botany and horticulture, the administration, care and maintenance of the garden, together with the training of gardeners, being undertaken by the scientific staff of the Ministry under the control of the Regius Keeper who, as Professor of Botany, is also responsible, with the assistance of university lecturers, for the training of students. The Regius Keeper has also the care and maintenance of a small botanic garden at the Forest of Benmore in Argyllshire—presented to the nation in 1925—designed for experimental cultivation of trees and shrubs of special interest to the study of forestry and agriculture.

THE ROYAL BOTANIC GARDENS, KEW

The Royal Botanic Gardens are not included among the Royal Parks: they are in fact a scientific institution. The administration of the gardens was transferred to the Board (now the Ministry) of Agriculture in 1903, though the Office of Works retained responsibility for the erection and maintenance of buildings. Of these the best known is the Palm House designed by Decimus Burton and

erected in 1844-48, which was for a long time the largest greenhouse in existence. Other buildings include the Herbarium and Library.

PALACES

The care of the Royal Palaces is the Ministry's oldest service. Originally the work done was paid for by the Sovereign out of the revenues of the Royal possessions. The Civil List then consisted of very large sums, from which the Sovereign met not only personal expenses, but the maintenance of all the many palaces and a good deal of the cost of the civil government of the State. In the early nineteenth century, when much building was undertaken by King George IV, the Civil List was supplemented both by sums drawn from the land revenues of the Crown and by grants voted by Parliament for the repair and extension of specific palaces. On the accession of King William IV the Civil List was reduced by Parliament and, amongst other things, the repair and maintenance of Royal Palaces and Gardens were transferred to the annual Parliamentary Votes. The principle of this arrangement has persisted ever since, although there have been numerous minor changes in the allocation of expenditure on palaces between the Civil List and the annual Votes, in an endeavour to strike a reasonable balance.

It is now customary to divide the palaces into two classes according to whether they are occupied by the Royal Family or not. The Ministry is entirely responsible for carrying out the work and meeting the cost of maintaining, and where necessary improving, the fabric of palaces in occupation, but it has nothing to do with the supply or maintenance of furniture, furnishings or pictures in these palaces: these are paid for by the Sovereign from the Civil List. The principal palace in occupation is, of course, Buckingham Palace. The conversion of Buckingham Palace to its present form was begun by King George IV in 1825, from the designs of John Nash. The East Wing was added in 1847-50 when Nash's Marble Arch was moved to the north east corner of Hyde Park. In 1913, the east front was reconstructed with Portland stone to the designs of Sir Aston Webb.

Windsor Castle has been in almost continuous occupation by the Sovereign since the days when William the Conqueror constructed the great mound on which the Round Tower stands. As well as the Castle itself, the Ministry is responsible for the Military Knights' Houses in Windsor, a Foundation of Officers associated with the Order of the Garter, and for Frogmore House, a late eighteenth century mansion in Windsor Home Park. The Park itself and the Great Park are maintained by the Commissioners of Crown Lands. The Lord Chamberlain's Office deals with the admission of visitors to parts of the castle open to the public.

St. James's Palace was built by Henry VIII in 1530 on the site of St. James's Hospital founded by the citizens of London in the thirteenth century; it was enlarged by James I in 1603-10. It was the sole town residence of Sovereigns from 1697, when Whitehall Palace was burnt, until 1762 when King George III bought Buckingham House; Kensington Palace was in those days regarded as a country residence. The Ministry maintains the furniture in the State Rooms, which are sometimes used for international conferences and other functions.

Unoccupied palaces in London are Hampton Court, Kew and Kensington Palaces. They are still the possessions of the Sovereign, whose pleasure is taken about changes proposed in them, and over the years they have gradually been opened to the public with Royal consent. They are maintained by the Ministry, which consults the Lord Chamberlain's Office on such matters as times of opening and closing. Most of the furniture and pictures shown to the public in them are from the Sovereign's own collection; the pictures and works of art are arranged and looked after by the Surveyor of the Queen's Pictures and the Surveyor of the Queen's Works of Art, who are members of the Royal Household, but the furniture is maintained by the Ministry.

Parts of Buckingham Palace, Windsor Castle and St. James's Palace are occupied as official residences by various officers and servants of the Royal Household. These official residences are maintained both internally and externally by the Ministry of Works, but the resident pays occupational charges which include gas, electric light, water and heating. There are also a few official residences at the palaces for Ministry of Works staff whose work requires them to live on the premises.

Considerable parts of the palaces not in occupation, and certain other houses belonging to the Sovereign, are used as Grace and Favour residences. The largest of these is Marlborough House, in the Mall. This house was built to the design of Wren for the Duke of Marlborough in 1708 on a site leased by Queen Anne to the Duchess. The house reverted to the Crown in 1835. Grace and Favour residences are entirely at the disposal of the Sovereign and are granted to other members of the Royal Family, to persons who have rendered special service to the Crown and, at Hampton Court, to widows of men who have rendered special service to their country. The residences are put into a good state of repair by the Ministry on change of occupation; thereafter their structural and external maintenance is the responsibility of the Ministry, while their internal maintenance is the responsibility of the resident, who also pays rates and fire insurance and meets the cost of light, heating and water. Many of these residences are unsuitable and badly planned for present day

requirements, and their modernisation is a difficult and expensive problem.

The Palace of Holyroodhouse in Edinburgh mostly dates from the time of King Charles II. The Abbey of Holyrood was founded by David I in 1128, and was used by later Scottish monarchs as a residence. A palace was built on an adjacent site by James IV in 1498–1503, but in 1544 both the Abbey and Palace were destroyed by the troops of Henry VIII of England. The Palace was rebuilt during the reign of Queen Mary, but was again burnt down in 1650 while occupied by Cromwell's troops. The Palace was partly rebuilt by Cromwell, but the building as it now stands is the result of a further reconstruction undertaken by King Charles II. Certain apartments in the north wing of the Palace have for many years been assigned by Royal Warrant to the Duke of Hamilton, who is Hereditary Keeper of the Palace. The Lord High Commissioner to the Church of Scotland, who is appointed by the Sovereign each year, occupies apartments in the Palace as representative of the Sovereign when attending the General Assembly. The historic rooms, State Apartments and Palace gardens are open to the public during the year, except when the Palace is in occupation either by the Sovereign or by the Lord High Commissioner. Part of the receipts from admission to the State Apartments are credited to a trust fund for the purchase of objects of interest which are housed in the Palace.

OSBORNE HOUSE

When Queen Victoria sought 'a place of one's own—quiet and retired', she chose a site near Cowes in the Isle of Wight. Osborne House was designed by the Prince Consort, with the advice of Thomas Cubitt the contractor, and was begun in 1845. It was here that the Queen spent much of her time after the Prince Consort's death. The estate was bought entirely from the Queen's private funds. It was offered as a gift to the nation by King Edward VII. The Osborne Estate Act, 1902, placed the buildings and grounds in the charge of the Office of Works, while the remainder of the estate was allotted to the Commissioners of Crown Lands. The State Apartments are opened each summer to the public; most of their original contents are retained and form an impressive and interesting collection of Victorian furniture, pictures and works of art of all descriptions. The Private Apartments of the Queen remained undisturbed, and were opened to the public for the first time in 1955. A short distance from the House is a wooden chalet known as the Swiss Cottage which contains a miniature kitchen and other rooms where the Queen's children and grandchildren played. There is also a museum containing the many curiosities collected at home and abroad by the Royal family. In

recent years the Ministry has restored the bathing machine which was used by the Queen on the beach at Osborne and this can be seen by visitors.

When he gave Osborne House to the nation, King Edward VII asked that, apart from the State and Private Apartments, it should be used as a convalescent home for officers of the Army and the Royal Navy. The Department thus became responsible for the appointment of staff and direct management of a health service as well as for the maintenance of the property. Subsequently the facilities were extended to officers of the Royal Air Force. Osborne can accommodate about 45 patients, but with the growth of their own medical services the need for a convalescent home for the three Services has declined, and in order to take full advantage of the facilities which Osborne offers, admission has been extended to retired officers, to the Civil Service, and to women as well as men. The Minister appoints a resident House Governor who is usually a retired physician or surgeon from one of the Services. The House Governor also has a general oversight of the arrangements for admitting the public to the State rooms. In the administration of the convalescent home the Ministry is advised by a House Committee, of which the Permanent Secretary of the Ministry is Chairman, and on which Service and other Government Departments are represented. There is an honorary consulting staff of eminent physicians and surgeons.

CEREMONIAL

Of all the historic functions of the Ministry referred to in this chapter, none is more closely linked with tradition than work in connection with State ceremonies. The most important of these is, of course, the Coronation, but there is a constant succession of minor ceremonies. There are annual events such as Trooping the Colour, the State Opening of Parliament and Remembrance Day. Then there are special occasions such as Royal Reviews, and State Visits by the heads of foreign States. The arrangements for State Visits are made under the direction of the Lord Chamberlain.

One of the Ministry's minor responsibilities as agent of the Lord Chamberlain's Office, is to see that flags are flown on Government buildings on the officially appointed flag flying days.

Though the Ministry often advises on decorations in many parts of London, its responsibilities are limited to its own 'estate'—Government buildings and the Royal Parks. The main task is to decorate the Mall and Government buildings in Whitehall, though when decorative schemes are planned by other authorities there is close co-operation to ensure that the different schemes will be in harmony.

There is no set pattern of decoration and each occasion calls for ingenuity and imagination on the part of the Department's design staff. Frequently stands have to be erected for the public on Government property along the route, and there is usually a good deal of work in connection with refreshment and first aid facilities, lavatories, loudspeakers, etc. Arrangements have to be concerted with the Police and other authorities concerned for closing roads, diverting traffic, directing crowds and parking cars, and the Ministry provides stands, in return for repayment, for the press, newsreel companies and radio and television reporters and cameramen. Floodlighting has become so popular that it is now customary to floodlight some Government buildings every summer, irrespective of any special occasion calling for celebration.

The Coronation is the ceremony which is charged with the greatest significance to the nation and it is here that the Ministry renders its most important service. At Her Majesty's Coronation in 1953 the Ministry was responsible for preparing the Abbey for the ceremony, designing and building the Annexe, constructing and managing stands along the route for 116,000 persons, decorating Government property, and many other activities.

In all preparations for state ceremonies the Ministry must, of course, work in conjunction with other authorities concerned with ceremonial, especially the Royal Household.

In view of the special importance of precedent in connection with ceremonial a detailed record is kept of the part played by the Ministry on every occasion. In addition, each division has on its staff officers with special experience of ceremonial, who are ready to come into action as soon as the Ministry is notified of an approaching ceremony—sometimes, as in the case of Royal funerals, at very short notice. A small administrative section assesses the importance of a particular occasion in consultation with other Departments concerned (usually the Lord Chamberlain's Office, the Home Office and the Foreign Office or the Commonwealth Relations Office) and co-ordinates action within the Ministry.

All ceremonial arrangements in Scotland which come within the Ministry's province are handled by the Scottish Headquarters Office in Edinburgh in direct consultation with the Scottish Home Department, the Lord Chamberlain's Office, local authorities and other Departments concerned. As in England, the Ministry's responsibilities are normally limited to decorating and floodlighting Government buildings, though the Ministry's advice is frequently sought on decorative schemes carried out by other authorities in Edinburgh and elsewhere. The most important occasion is the State Visit of the Sovereign to the Palace of Holyroodhouse, which usually takes

place each year for one week, when the Ministry is responsible for preparing the Palace for occupation by the Royal Household and staff. Similar arrangements are made for the residence each year of the Lord High Commissioner and his suite. The Ministry is also responsible for preparing the Royal Pew in St. Giles' Cathedral for use by the Sovereign and Lord High Commissioner when required. On the occasion of the Coronation visit of the Queen to Scotland in June, 1953, the Ministry had the special task of preparing St. Giles' Cathedral for the National Service of Thanksgiving and Dedication.

CHAPTER VIII

Public Buildings and Works of Art

The Houses of Parliament — Royal Courts of Justice — County Courts — Courts of Law in Scotland — Sheriff Courthouses — Museums and galleries — Records — Statues — Trafalgar Square and Parliament Square — Works of art.

*

THE HOUSES OF PARLIAMENT

AS part of his general duties to provide and maintain buildings for Government services, the Minister of Works is responsible for the maintenance and furnishing of accommodation for Parliament. The two Houses sit in Her Majesty's Palace of Westminster, and the custody and control of the Palace are vested in the Lord Great Chamberlain, an hereditary Officer of State. He authorises the use of accommodation by warrant, maintains the security of the Palace and controls admission of the public. In practice, the Lord Great Chamberlain delegates his control of that part of the Palace occupied by the Commons to the Serjeant at Arms and gives a warrant for this purpose to each Serjeant on his appointment. The Serjeant's control runs, however, only when the Commons are sitting and authority reverts to the Lord Great Chamberlain at other times. In his turn, the Serjeant delegates to the Minister of Works the rooms occupied by Ministers and Whips, and the Minister allocates them at his discretion.

There is one part of the Palace, however, which is the special interest of the Minister of Works, independently of the Lord Great Chamberlain's authority. Since 1884 the office of Keeper of the Old and New Palaces at Westminster has been vested in the office of First Commissioner (later the Minister) of Works, and by virtue of this office the Minister exercises jurisdiction over Westminster Hall. At one time the responsibilities of the Keeper must have been wide, but during the nineteenth century they became confined to the custody of Westminster Hall, a function incidentally which yielded some profit so long as the Hall was used as Courts of Law and rents could be obtained by letting stalls for the sale of goods. Nowadays, the

Hall is used occasionally for ceremonies which directly concern the Crown, Parliament and the Law.

For the Palace as a whole, however, the Ministry's main concern is with maintenance, furnishing and adaptation. Each year the Lord Great Chamberlain issues a formal warrant to the Minister to carry out 'such alterations and repairs against meetings of Parliament as may be necessary for the public service'. In discharging these functions the Minister is, of course, answerable to Parliament in the usual way for what he does and the money he spends. Responsibility for maintenance carries with it control of the exterior of the building and access to the roofs and towers, including the Clock Tower. Whilst Parliament looks to the Minister as formally answerable for expenditure and the proper care of the Palace, the two Houses and their representatives clearly have a more personal everyday interest in the Ministry's activities. The Lord Great Chamberlain and the Serjeant at Arms take good care of the interests of the Lords and Commons respectively, but it is open to any Member of either House to make representations to the Minister, and in matters which often concern them closely it is not surprising that they should frequently do so. It is, moreover, part of the Minister's policy that he, and his Department, should maintain close and friendly contact with the Lord Great Chamberlain and with Members and officials of both Houses. The Ministry strives to ensure, therefore, that all interested parties are consulted before works are carried out.

These informal relationships work well, but there has been a growing movement in the House of Commons to give individual Members of Parliament a clearer channel through which to express their views on accommodation and other matters. In the past, it has been usual to appoint *ad hoc* Select Committees from time to time to examine accommodation problems, but the Government has recently decided that, as an experiment, a Select Committee should be appointed for one Session to advise Mr. Speaker on the facilities available to Members, including accommodation. The House of Lords already has a Committee with comparable functions.

The Palace covers an area of eight acres, and provides a covered space of more than 500,000 square feet and 1,100 rooms. The building is ornate in style and its plan is not well suited to modern requirements. Modern heating, ventilation, sanitary and electrical services have been installed, some of them since the war when the Commons Chamber was rebuilt. The mechanical and electrical services demand continuous attention and, in particular, the heating and ventilation plant for the Commons' new building has to be manned twenty-four hours a day while the House is sitting. Only during a long recess is there time for major overhauls and repairs. Even routine sweeping

and dusting of the Palace is an immense job; there are four and a half acres of linoleum and six acres of carpets besides the panelling, statues and pavements.

The Ministry has to maintain a high standard of day-to-day service at the Palace. This task has become more difficult since the war as the increased burden of work falling on Parliament demands longer attendance in the Palace from Members and officials. During the war many maintenance jobs had to be neglected and these arrears are only gradually being overtaken. To provide the day-to-day services required, the Ministry employs a staff of nearly 300 in the Palace. At first sight this may seem a large number, but on more than one occasion there have been special investigations which have shown that the staff is needed if the services which the Ministry provides are not to suffer.

In considering major works of repair, redecoration, extension and improvement, the Ministry must take care that proposals do not offend interests within the Palace or opinion outside. The maintenance of the fabric in its solid and ornate style has become expensive, and the Ministry is often faced with the problem of deciding whether to spend more money than is really needed on repairs simply for the sake of keeping to the original design. The Ministry has felt bound to economise where possible, but so far this has been achieved without detriment to the general appearance of the Palace. It is indeed difficult to foresee a time when the Houses of Parliament and public opinion would accept a standard of work which would detract from the character of the Palace.

ROYAL COURTS OF JUSTICE

The Royal Courts of Justice in the Strand were built by the Department in 1865–82 when the annexe to Westminster Hall, which held a number of Courts, was demolished. The architect was G. E. Street. The Ministry still maintains them, and has been engaged since the war on a programme of improvement.

COUNTY COURTS

A comparatively unnoticed, but important, service for which the Ministry has been responsible since 1870 is that of providing accommodation for County Courts and offices for Registrars. Suitable court accommodation is often obtained in public buildings by arrangement with local authorities, the Ministry paying the cost of heating, lighting and cleaning, but the Ministry also erects or hires courts where necessary; the Ministry has power to contribute towards a local authority's cost of erecting or reconstructing suitable public

buildings for courts and offices. In the few cases where Registrars are solicitors in private practice the Ministry contributes to their office charges; normally, however, Registrars now hold full-time appointments and offices are provided for them as near the courts as possible.

COURTS OF LAW IN SCOTLAND

The Edinburgh Courts of Law comprise the First and Second Divisions which are the Courts of Appeal in Scotland, the High Court of Justiciary, which is the Supreme Criminal Court, and the Court of Justice, which is the generic name of the Supreme Civil Court. For the greater part of their existence they have occupied the buildings connected with the Old Scottish Parliament and called to this day the 'Parliament House'. The main part of the building is occupied by the Great Hall, similar in design to Westminster Hall though on a smaller scale. Clustering round it are various Courts, as well as the libraries of the three principal legal bodies in Scotland, the Faculty of Advocates, comprising the entire Scottish Bar, the Society of Writers to Her Majesty's Signet, and the Society of Solicitors Before the Supreme Courts. The great stained glass window at the south-east end of the Great Hall, representing the inauguration of the College of Justice by James V of Scotland in 1532, was designed by William von Kaulback and executed by Maximilian Ainmiller of Munich in 1868. The chair used by Sir Walter Scott when he occupied the position of a Principal Clerk to the Court of Session is the property of the Ministry and is located for exhibition in the Upper Corridor of the Advocates' Library. Its only use, now, is as the Dean's Chair at meetings of the Faculty of Advocates.

SHERIFF COURTHOUSES

Since 1860 the Ministry has controlled expenditure on Sheriff Courthouses in Scotland. The buildings are vested in Commissioners of Supply, who in most cases are specially appointed members of a County Council, but in one or two exceptional cases, such as Edinburgh and Glasgow, the buildings are vested in special Commissioners appointed under special Acts of Parliament. One half of the cost of alterations, additions or improvements to Sheriff Court accommodation, including the provision of new buildings, is made from voted funds, and the remainder falls upon rates. Annual fixed grants are made by the Ministry towards the maintenance of Sheriff Courthouses. These grants are intended to cover the periodically recurring services, including heating, lighting, cleaning and care-taking.

MUSEUMS AND GALLERIES

The Ministry looks after the buildings in London and Edinburgh which house the national collections of pictures and works of art, the national museums, libraries and records. There are now over twenty separate institutions of major importance and the Ministry's annual expenditure on this service, including furnishing and equipment, amounts to over £1,000,000 per annum. The general development of museums and galleries is guided by a Standing Commission representing the different groups of institutions which was set up in 1931. The Commission co-ordinates plans and recommends priorities between the different institutions but, unlike the University Grants Committee, it does not itself allocate funds.

The buildings occupied by the museums and galleries vary almost as much as their contents. With the exception of a few static collections like the Wallace Collection, museums and galleries and depositories of records show an insatiable and increasing appetite for space, and new buildings have to be planned both for general purposes and for such special needs as the micro-film laboratory recently built for the British Museum.

The problems which arise in the display of works of art and in their preservation call for the Ministry's utmost resource and skill and involve the closest co-operation with the staff and trustees of the galleries. For instance, the aims and ideals of those in charge of pictures and the means at their disposal have greatly altered since most of the buildings were erected in the course of the nineteenth century. The aim now is to present pictures as nearly as possible in the state in which they were originally painted and, with the aid of scientists, great progress is being made in removing later accretions. The Ministry of Works co-operates by arranging for the best possible natural and artificial lighting and by providing conditions which will preserve the pictures from their great enemies—variations of humidity and temperature, and atmospheric dirt. The Ministry's architects and engineers are therefore called upon to develop new lighting and air conditioning methods, and they have made very considerable progress in recent years. At the same time the Ministry has had to make greatly increased provision for visitors to the museums and galleries.

Museum buildings must fulfil certain common requirements: they must provide large, well-lit floor areas; most of them must have storage as well as exhibition space, and this is becoming especially important, not only as the collections accumulate, but owing to the tendency, no less apparent in the museums than in the galleries, to reserve space for loan and temporary exhibitions. In some cases the accommodation must be adapted to specially large or heavy exhibits, e.g., the Whale House in the Natural History Museum, the parts of

the Science Museum containing flying machines and other bulky equipment, or the sculpture galleries of the British Museum. In this country, however, the tendency to fit the buildings to their contents has not been carried so far as in some other countries. Part of the building must be devoted to research and study, with extensive library facilities, and in the case of some museums, for instance the Natural History Museum with its entomological, botanical and zoological collection, this proportion may be very high. The British Museum presents special accommodation problems in uniting what are probably the world's richest museum and library in one institution. To find a satisfactory solution of both the physical and the aesthetic requirements of such buildings is a difficult and specialised branch of architecture, and the provision of adequate lighting, heating and ventilation in these vast edifices, suited both to the display and the preservation of their precious contents, makes equally high demands upon the engineer. The decoration of the museums, as of the galleries, calls for taste and invention on the part of the Ministry's surveyors who work in close co-operation with the Museum staff. The demands on the designing ability and technical resources of the Supplies Division in the provision of furniture, showcases and equipment are also exacting.

RECORDS

The Ministry also provides accommodation for records other than those kept in museums, and of these the principal collections are those of the Public Record Office and the Patent Office. The former institution was established by Act of Parliament in 1838 to provide accommodation under one management for the national archives which had accumulated since the Norman Conquest, other than those of Parliament, which are kept in the Palace of Westminster. The Public Record Office obtains, sorts and keeps records which continue to accumulate in the Departments of Central Government and the Courts of Law, and provides facilities for their use by students and historians. Some of the older documents were formerly kept in the Chapter House of Westminster Abbey, while the Chancery Records were kept from the fourteenth century till 1895 in a chapel built originally on the site of the present Public Record Office Museum in Chancery Lane; the chapel was built by Henry III in 1232 as part of the House of Converts for the reception of Jews who had embraced the Christian faith. The Museum incorporates the sepulchral monuments, some of the stained glass and furniture and other parts of the chapel. The present buildings in Chancery Lane, which were erected in 1850-55 and subsequently enlarged several times, have for long sufficed to accommodate only a part of the vast collections of the

Public Record Office. The remainder was for a time located in disused gaols, first at Cambridge and then at Canterbury. Since the war a large repository for records has been established at Hayes, Middlesex, and, in addition, temporary buildings erected during the war in Ashridge Park, near Berkhamstead, have been converted for use as an overflow repository. As in the case of museums, a considerable amount of special treatment of this accommodation is necessary, including fireproof rooms and special shelving.

The practice of granting royal letters patent to inventors originated as long ago as the reign of Edward III and developed more or less continuously into the present practice whereby inventors, or other persons seeking patents, file specifications which are examined in relation to previous patents granted in the same field and, if the patent is granted, are included in the Patent Register and become available to public inspection. It will be apparent, therefore, that a very large technical and historical reference library and a public reading room are required by the nature of the Patent Office's functions. These facilities are provided in the Patent Office buildings in Chancery Lane. The Patent Office Museum was incorporated in the Science Museum, South Kensington, in 1884, greatly extending the scope of the latter and in fact advancing it from the status of the teaching collection of the Royal College of Science of that day to the standing of a national museum of applied science. Both the Patent Office and the Public Record Office are in urgent need of new accommodation and it will be the Ministry's task to design and construct buildings worthy for their purpose.

STATUES

For the last hundred years the Ministry has been concerned with public statues in London. When the Government of the day considered that the London statues were suffering from neglect, an Act was passed, in 1854, placing fifteen statues in the charge of the Office of Works and allowing the owners of other statues in the Metropolitan Police District to transfer them to the Office, subject to the consent of the Treasury. The Office was, moreover, empowered to erect and enclose statues in any public place in the same area, and to repair them at public expense. It was made an offence to damage a public statue, and the written consent of the Minister is required for the erection of any public statue.

In some ways the scope of the Public Statues Act is embarrassingly wide, for since the Act was passed the area of the Metropolitan Police District has been greatly extended and now includes places which are far removed from Central London. Moreover if the Ministry permits the erection of a statue its action may be interpreted as

implying a readiness to look after the statue at public expense, if its owners neglect to maintain it properly. If, however, the Ministry exercises its power of veto or insists upon an endowment for maintenance, it may be accused of exercising an arbitrary censorship, whether in the interests of official taste or of public parsimony, over the free expression of local patriotism and sentiment, not to mention artistic genius.

The Ministry has, therefore, used its powers primarily to control the placing of statues and monuments in the more frequented parts of Central London, particularly the Westminster area. Its responsibilities have been lightened by the Public Health Act, 1890, which gave local authorities the power to authorise the erection of, and to maintain, statues and monuments, and even to remove them if they see fit—a contingency not apparently contemplated by the Act of 1854. Moreover, of recent years most of the more important statues in London have been erected by the Ministry itself in pursuance of resolutions of Parliament, or by national memorial committees in the case of deceased Sovereigns, and in both cases the site is usually provided by the Government on Crown land.

The creation of a new statue or memorial is a much more complicated matter than might at first appear. The site selected is influenced by, and in turn may itself influence, the nature, scale and design of the statue. Some areas are appropriate for the commemoration of eminent figures in special fields of endeavour, e.g., Parliament Square for statesmen, Whitehall for soldiers and Trafalgar Square for sailors. An important consideration is whether the new statue is suited to its surroundings and companion works. There is a great shortage of sites in Central London suitable for statues of importance, especially as it is the Ministry's policy to exclude statuary from the Royal Parks and admit only a limited number of fountains and other works suitable for gardens. It is often suggested that the number and siting of memorials should be reviewed and even that some should be removed, but the Department's experience is that at the first sign of real intention to move a memorial dormant interests spring into life in protest. These natural reactions make it difficult to rationalise the arrangement of existing statues or to dispose of those which would seem to have outlived their day.

When sculpture is to be associated with a building other problems arise. The scale of large modern buildings and their plain style make especially difficult the successful marriage of sculpture and architecture. In the case of new Government buildings the Ministry has been able in some cases to include sculpture as part of the building and to bring the sculptor into association with the architect at a very early stage in the design. There is no happier

example of this than the Queen's Beasts, the legendary figures of heraldry from coats of arms of ancestors of the Royal Family, which were designed for the Annexe to Westminster Abbey for the Coronation.

Public approval of sculpture commissioned by the Ministry is rarely given as freely as it was for the Queen's Beasts, and where questions of taste and artistic merit are involved the administrator may have the difficult role of deciding between different views of those who can justly claim to be authorities in the world of art. The administrator must also keep in mind the expectations and sentiment of the public who are likely to be critical of expenditure on works which are a break with tradition. Fortunately, in this as in other questions of design and taste the Ministry has the help and advice of the Royal Fine Art Commission.

The hundred or more statues and monuments in London for which the Ministry is responsible range from large royal memorials, like the Albert Memorial in Kensington Gardens and the Queen Victoria Memorial opposite Buckingham Palace, to simple heads in bas-relief like that of Lord Grey of Fallodon upon the wall of the Foreign Office. Few of the earlier statues are now considered to have outstanding artistic merit, the best being the seventeenth-century equestrian statue of Charles I by Le Sueur in Trafalgar Square. This statue was cast in 1633, sold for melting down by the Commonwealth, but survived to be put up, on the Restoration, at Charing Cross. Other noteworthy seventeenth-century statues are those of King Charles II at Chelsea Hospital and of King James II outside the National Gallery, both by Grinling Gibbons. These three statues were amongst the fifteen originally mentioned in the schedule to the Statues Act, 1854.

Statues erected since the war include the memorials to King George V opposite the Houses of Parliament, to King George VI in Carlton Gardens and to President Roosevelt in Grosvenor Square Gardens. A statue of Field Marshal Smuts will be unveiled in 1956.

The maintenance of statues is usually a simple matter, but after the enforced neglect during the war, and damage from enemy action, a considerable programme of repair had to be undertaken in which the Ministry had the advice of the experts of the Victoria and Albert Museum who look after the national collection of sculpture. The cleaning of the larger monuments is a major operation; in the case of Nelson's Column the services of steeplejacks are needed.

Expenditure on memorials erected at public expense in accordance with resolutions of Parliament is generally met in the first instance by advances from the Civil Contingencies Fund; a special Vote is taken subsequently, in the year in which it is expected that the final

charge will be brought to account, the object being to avoid a series of small estimates.

TRAFALGAR SQUARE AND PARLIAMENT SQUARE

Mention may here be made of the two squares, both notable for their statuary, which are controlled by the Ministry: Trafalgar Square and Parliament Square. The former was laid out in the period 1837–45 at the time of the construction of the National Gallery, when Nelson's Column was also erected. The statues of King George IV, Sir Henry Havelock, Sir Charles Napier and General Gordon were added later. The fountains were rebuilt after the recent war; busts were placed behind them against the north wall of the square, and large flower beds formed in front of them, as a memorial to Lord Jellicoe and Lord Beatty, thus restoring the original naval character of the site. The statue of Gordon was re-erected in 1953, in a more suitable position in front of the new Government offices in Whitehall Gardens. The Square is vested by Act of Parliament in the Crown and its care, control and management in the Ministry. The regulations permit the holding of public meetings, with the agreement of the Commissioner of Police. While the Ministry tries to avoid restrictions on the activities of the public in the Square, it has had to issue licences in order to control the activities of street photographers and vendors of pigeon food. The pigeons and starlings are a problem owing to their increase in numbers and their deposits on the Square, the statues and neighbouring buildings. Many experiments have been tried to discourage them but no effective remedy has yet been found.

Parliament Square was laid out in 1868 and remodelled in 1951 when the traffic roundabout was replanned to improve traffic circulation, including access to the Festival of Britain held on the South Bank across Westminster Bridge. It is controlled by the Ministry under the Parks Regulations Acts; no meetings are allowed in it. It contains statues of Peel, Palmerston, Derby and Beaconsfield and also, in a separate enclosure to the west, of Canning and Abraham Lincoln.

WORKS OF ART

As well as looking after the galleries which house the national art collections, the Ministry itself owns a large number of works of art, some of which have been in its charge for centuries. Among the best known of these are the painted ceilings and walls of palaces and historic buildings, including the Rubens ceiling in the Banqueting House, Whitehall, the Painted Hall at Greenwich and the ceilings and decorations by Verrio at Hampton Court and by William Kent at

Kensington Palace. There are also numerous wall paintings in the Houses of Parliament. From time to time frescoes and early wall paintings are uncovered in various ancient buildings, which may also contain ornamental plaster work, wood carvings and other masterpieces of interior decoration. To look after these paintings the Ministry maintains a small staff of artists under the control of the Architects' Branch which deals with historic buildings. Occasionally the Ministry commissions murals for entrance halls and other suitable rooms, or places wall space and materials at the disposal of local schools of art.

As well as these fixed works of art, the Ministry also owns a large number of pictures and sculptures. Reference is made elsewhere (Chapter V) to the supply of pictures to Government buildings overseas; they are also provided for some buildings in this country. Pictures are supplied only to buildings which are furnished by the Ministry. In this country original pictures are provided only for the State rooms of official residences, special conference rooms and rooms occupied by Ministers and very senior staff. Inexpensive reproductions are supplied to Government offices for display in public rooms, conference rooms, canteens and other welfare rooms and large offices occupied by staff engaged on routine duties.

Treasury funds have been available for the purchase of works of art since 1907. These funds are small in relation to the demand and the money has to be spent sparingly. Most of the Ministry's pictures are by British artists, and English landscapes of all periods and portraits of persons with historical associations are especially sought after. Pictures are also borrowed from the national galleries, from private owners and occasionally from provincial galleries. Loans from the national galleries are subject to the conditions of the National Gallery and Tate Gallery Act, 1954, and to the approval of the Trustees. In other cases, the owners are indemnified by the Ministry against an agreed valuation. Gifts of pictures are also gladly accepted.

Photographic indexes are kept of the 4,500 pictures in the Ministry's charge and annual reports are obtained of their condition. The Ministry cleans and maintains the pictures, but nothing is done to works on loan without the owners' consent.

In 1953 the Ministry was made responsible for commissioning the State portrait of the reigning Sovereign; it also supplies copies to the major Embassies abroad and reproductions to less important posts.

On all these matters the Ministry is advised by a Curator of Pictures.

The Ministry is responsible for housing the national collection of arms and armour in the Armouries of the Tower of London. The

Ministry also looks after arms and armour forming part of general displays of historic objects in other buildings, and it is responsible for a large number of tapestries, some belonging to the Government and some lent by private owners. These are hung in Royal Palaces, in historic buildings, and in some of the major residences abroad.

The Ministry, as the Government's general provider, is therefore concerned in many ways with works of art of all kinds ranging from stained glass windows to modern street decoration, and is itself the designer on a vast scale of buildings, gardens and furnishings. There is ample scope for creative ability and artistic discrimination in many fields, while its more mundane responsibilities for the housing of the apparatus of Civil Government keep its feet on the ground. It is the Ministry's constant aim to use the knowledge with which this dual experience has endowed it so as to maintain a high standard of artistic taste while being subject to the disciplines of the public service.

CHAPTER IX

The State as Guardian of the Past

Historic buildings of the Crown — Ancient Monuments — The upkeep of buildings of historic or architectural interest — Organisation.

*

HISTORIC BUILDINGS OF THE CROWN

THE responsibilities of the Ministry for protecting historic buildings and ancient monuments are derived partly from the duties placed on the Department for maintaining the King's works and partly from Acts of Parliament. The Ministry is responsible for a number of historic Crown buildings, some of which are still in use. They include palaces not occupied by the Royal family, like Hampton Court, Kensington and Kew, buildings now in use as offices, like Somerset House and the Horseguards, other buildings now used as museums or for other special purposes, and a number of castles. Some of these castles were transferred to the Ministry when they were no longer required for defence purposes. They include, for instance, some of the castles erected along the South Coast by Henry VIII against a possible attack by the Spaniards; examples are the castles at St. Mawes and Pendennis guarding the sea approaches to Falmouth, and Hurst Castle at the entrance to the Solent. Others are still occupied, for instance the castle of Walmer which is the official residence of the Lord Warden of the Cinque Ports.

The most famous of the historic Crown fortresses are the Tower of London and Edinburgh, Stirling and Caernarvon Castles. The Tower, and the Castles of Edinburgh and Stirling are still partly occupied by the military, but owing to their historic interest they are opened to the public; they are maintained by the Ministry. At the Tower the yeomen warders, popularly known as 'Beefeaters', act as custodians and the Ministry of Works is responsible for their pay and working conditions. These warders were first mentioned in 1543 and their scarlet uniforms worn on State occasions and official ceremonies date from that period; they consist of about forty Army or Air Force pensioners holding their appointments for life. Crown, military and civil authorities all have their part in the appointment of officers and the control of activities at the Tower. The Crown,

through the Lord Chamberlain, controls the Keeper of the Jewel House, and his assistant the Curator. The Constable, appointed by the Crown, is in charge of the general government of the Tower. The Resident Governor, appointed by the War Office, is the Constable's representative at the Tower; his responsibilities include the admission of the public and the discipline of the yeomen warders. The Master of the Armouries is appointed by the Minister of Works, and the Receiver of Fees and his staff are jointly employed by the War Office and the Ministry. As might be expected in an institution preserving so much of mediaeval origin, the demarcation of responsibilities is often not exactly defined, but the arrangements work smoothly enough in practice.

Edinburgh Castle, the birthplace of James VI of Scotland and James I of Great Britain, and for many centuries a residence of Scottish Kings, was handed over for maintenance purposes by the War Office to the Office of Works in 1903. The oldest surviving building in the Castle is St. Margaret's Chapel, an interesting Scottish example of Norman architecture of the thirteenth century. The Castle also contains the Scottish National War Memorial, the Scottish Regalia, the Scottish United Services Museum, and the Banqueting Hall. Quarters are provided in the Castle for the Governor of the Castle, who is also G.O.C.-in-C. Scottish Command.

Stirling Castle, also for many years a residence of Scottish Kings, first emerges into the light of history in the reign of Alexander I (1107-24), but most of the buildings now existing—the Chapel Royal, Great or Parliament Hall and the Palace Block—date from the fifteenth and sixteenth centuries. The Castle was the birthplace of James III of Scotland and the scene of the Coronation of Mary Queen of Scots.

Caernarvon Castle, the historic fortress of Wales, was built as the Royal capital of the Principality of Wales in the late thirteenth and early fourteenth century by Edward I, who was also responsible for building a number of other castles in North Wales—such as Harlech, Beaumaris, Flint, Rhuddlan and Denbigh—all of which are in the Ministry's care. The mediaeval town was surrounded by an unbroken circuit of walls and towers, most of which are also in the Ministry's hands. The Castle has always remained in the possession of the Crown and passed into the hands of the Office of Works from the Office of Woods in 1908. The investiture of the Prince of Wales took place in the Castle in 1911.

Other castles maintained by the Ministry but occupied by the military are those of Dover, Carlisle and Tynemouth.

At Greenwich is a group of buildings which form a unified architectural composition unique in this country. It consists of the Royal Naval College and the Queen's House.

The Queen's House is a delightful Renaissance building which was designed by Inigo Jones when he was Surveyor-General to James I. It was intended as a residence for Anne of Denmark, consort of James I, but on her death in 1618 the work was stopped. Building was resumed by Charles I who gave the house to Queen Henrietta Maria. The old Greenwich Palace was destroyed in the Civil War, but the Queen's House was saved and at the Restoration Henrietta Maria, the Queen Mother, returned to live in it until her death in 1669. After the Revolution of 1688 it was occupied by successive Rangers of Greenwich Park who from 1710 to 1729 were Governors of the Royal Hospital. In 1806 the House and gardens were handed over by Act of Parliament to the Royal Naval Asylum which in 1821 was merged in the Greenwich Hospital School. In 1933 the school was removed to Suffolk and the Queen's House was placed in the charge of the Office of Works. The worst of the disfigurements of the nineteenth century were removed and in 1934 the use of the House was granted to the National Maritime Museum. It was opened to the public in 1937. Efforts have been made to preserve the internal as well as external appearance of the house as nearly as possible according to the design of Inigo Jones and in the form in which it was occupied by Queen Henrietta Maria.

The College buildings, fronting the Thames, consist of four stately blocks, one of which contains the Painted Hall with walls and ceilings decorated by Sir James Thornhill. When the Tudor Palace of Placentia was destroyed, Charles II intended to build a new Palace at Greenwich but only one block was completed in his reign. In William and Mary's reign it became a hospital for disabled seamen. The original plan was Wren's but the building was completed by Vanbrugh, Hawksmoor and others. The buildings were assigned to the Admiralty in 1873 for their present use as the Royal Naval College. Responsibility for the maintenance of the buildings was transferred to the Office of Works in 1925.

The Royal Hospital, Chelsea, was also built by Wren. The Hospital is managed by Commissioners at the expense of Army funds but the Ministry is responsible for the maintenance of the buildings.

A number of historic houses in London and elsewhere are maintained by the Ministry for various public purposes and are open to the public. The most notable is Lancaster House which was built under the name of York House near St. James's Palace in the early nineteenth century for the Duke of York. The ground lease was subsequently sold to the Duke of Sutherland by the Commissioners of Woods and the house was renamed Stafford House; the price was devoted to the purchase of Victoria Park in the East End of London, an enterprise in which the Office of Works, then united with the Commis-

sioners of Woods, took part. The residual value of the lease was purchased by Lord Leverhulme in 1913 and the property, now known as Lancaster House, was assigned to the Commissioners of Works and is now used for Government receptions.

Other historic houses are used as branches of the Victoria and Albert Museum; Apsley House, Hyde Park Corner, is perhaps the most important. Under the Wellington Museum Act, 1947, the contents became the property of the Victoria and Albert Museum and the building that of the Ministry of Works. The Duke of Wellington retains apartments on the upper floors. The house was built in 1777-78 from designs by Robert Adam for the second Earl Bathurst, known as Baron Apsley before succeeding to that title. The house was extended and refaced by the first Duke of Wellington, for whom it was bought by the trustees of the Parliamentary grant made to him after his victories. Severely damaged by bombs during the last war it was completely renovated by the Ministry before it was opened to the public in 1952. Monuments in the near neighbourhood of Apsley House which have associations with the Duke of Wellington are in the Ministry's charge. One is the Constitution Hill Arch, designed by Decimus Burton, which was erected in 1828 in front of the entrance to Hyde Park and crowned in 1846 with a huge equestrian statue of the Duke of Wellington. In 1883 the Arch was removed to its present site at the top of Constitution Hill and the statue was taken to Aldershot, being replaced 30 years later by the present group of Peace in a Quadriga. The other monuments are the present equestrian statue directly opposite Apsley House, which was substituted in 1883 for the statue removed from the Arch, and the Achilles statue, just inside Hyde Park, erected in honour of the Duke in 1822 and cast from cannon taken in his victories.

Two other branches of the Victoria and Albert Museum are situated at Ham House and Osterley Park. Ham House was an early seventeenth-century residence enlarged and redecorated in the baroque style by the Lauderdale family at the time of the Restoration. It was presented to the National Trust in 1948 by Sir Lyonel Tollemache, Bart., whose ancestors had inhabited it for three centuries. The National Trust made over the house and gardens to the Ministry on a long lease while the contents, as historic and remarkable as the house itself, were purchased by the Government and entrusted to the Museum.

The original house at Osterley Park was built, and the park created, by Thomas Gresham, the richest of the merchant adventurers of Queen Elizabeth I's day. In the early eighteenth century it was bought by another family of bankers, the Childs, who transformed the Tudor house into a monument of eighteenth-century classicism, employing

Sir William Chambers initially, but mainly Robert Adam, upon the alterations. These two were joint chief architects of the Office of Works at the time. The Earl of Jersey gave the house and grounds to the National Trust in 1949.

Chiswick House is another famous building which the Ministry has taken over and is now restoring for public exhibition. The House was built in the early eighteenth century to designs based upon the Palladian villas of Italy by a notable connoisseur, the Earl of Burlington, assisted by the architect Kent. The villa is a delightful structure of a kind very rare in this country and stands in grounds which are being restored and maintained in their original layout by the local authority.

Audley End, near Cambridge, an early Jacobean house with baroque additions by Vanbrugh, was purchased by the Ministry for display to the public; the original furniture is lent by the owner, Lord Braybrooke.

ANCIENT MONUMENTS

The first Ancient Monuments Act, passed in 1882, was chiefly important as acknowledging the State's interest in the preservation of ancient monuments. Like similar Acts of the ensuing 30 years, the Act contained no element of compulsion and preservation depended entirely on the goodwill and co-operation of the owners of monuments. It was not until 1913 that the First Commissioner of Works was given powers to prevent the damage or destruction of monuments. The Act of 1913 was extended by Acts in 1931 and 1953.

The term 'ancient monument' is defined so widely that it would be capable of including almost any building or structure made or occupied by man at any time, and the Ministry is responsible for the care and preservation of all kinds of structures and remains from pre-historic settlements, camps and barrows, Roman walls and Norman castles to Gothic abbeys and a few Renaissance buildings. The Acts do not, however, include for most purposes buildings inhabited as dwelling houses. Ecclesiastical buildings are also expressly excluded, so that cathedrals and churches still in use are outside the scope of the Acts. The Ministry does, it is true, maintain a few buildings of this description for a variety of historical reasons, but not under the Ancient Monuments Acts. For instance, churches or chapels are situated in a number of historic Crown buildings such as the Church of St. Peter ad Vincula in the Tower of London, and the parish church of St. Mary in Castro at Dover. The Ministry also maintains several Royal Chapels, and for historical reasons the Chapter House and Pyx Chamber in Westminster Abbey. In Scotland the final abolition of prelacy in the Established Church and the annexation

of the temporalities of ecclesiastical dignitaries resulted in the Crown acquiring an implied interest in the maintenance of certain cathedral churches. In the cases of Glasgow and Dunblane Cathedrals, which are still in use, this interest was defined and extended in the nineteenth century. As a result, the Ministry of Works now has the sole responsibility for the maintenance of the fabric of these cathedrals.

The Ministry is required by the Acts to compile and publish lists of monuments whose preservation is of national importance. The lists must include all monuments recommended by the Ancient Monuments Boards for England, Scotland and Wales and may also include other monuments. These Boards are appointed by the Minister as advisory bodies, and consist of eminent archaeologists and historians and representatives of learned societies and interested public bodies. When a monument has been listed the Ministry informs the owners and occupiers of the fact and of the obligations entailed; notifications are also sent to local authorities concerned and, as the effect of listing persists through change of ownership, an entry is made in the register of local land charges. The owner of a listed monument must give the Ministry three months notice of any intention to repair, alter or demolish it or to do any work affecting it; there are penalties for non-compliance and for damaging listed monuments. If the Ministry receives notice of work which it thinks should not be done and the owner refuses to withdraw his proposals, or if the monument becomes otherwise in danger of destruction, removal or damage from neglect or injudicious treatment, the Ministry may serve on the owner an Interim Preservation Notice placing the monument under its protection. If the monument is still in need of protection after twenty-one months, the Minister may make a Preservation Order subject, in the case of objection, to confirmation by Parliament; otherwise the Interim Preservation Notice then lapses if it has not been previously revoked. While either Notice or Order is in force any work requires the written consent of the Minister. Fortunately owners are usually prepared to treat their monuments with proper care or to abandon proposals for destruction, and Preservation Orders are rarely needed. Nowadays a more frequent danger is the encroachments of gravel pits, quarries, brickworks, mines and factories. In such cases the protection of the monument is more difficult and may involve negotiation with the planning authority and the intending developers in conjunction with the Ministry of Housing and Local Government and other Departments concerned. The Ministry, however, itself has power, subject to public enquiry and payment of compensation, to make schemes preserving the amenities of monuments and prohibiting or restricting the erection of buildings, the felling of trees, quarrying, etc., within a pres-

cribed area. These powers were used in connection with one of the most important monuments in the country, the Roman Wall in Northumberland, where the threat of quarrying originally caused powers for such preservation schemes to be taken in 1931. Planning authorities have somewhat similar powers.

Expert advice, and sometimes technical instruction and supervision, about the treatment of old buildings are given to private owners free of charge, and a great deal of worthwhile preservation is achieved by this means. The Ministry may, with the consent of the Treasury, acquire any ancient monument, including inhabited buildings. It may also become the guardian of monuments, though not of inhabited buildings, by means of a simple deed executed by the owner. This places on the Ministry in perpetuity the duty of preserving, maintaining and managing the monument, whose actual ownership remains unaffected. Certain local authorities are also able to become guardians of monuments, but they seldom do so.

When a monument has passed into the care of the Ministry it is normally opened to the public for a small admission fee after preservation work has been completed. A full-time custodian, usually an ex-serviceman, is appointed to collect the fees, attend to the visitors and undertake maintenance duties. At the most important monuments guidebooks and postcards are available. There is also a series of six regional guidebooks covering England, Wales and Scotland, each of which gives a general survey of the archaeology of the region and descriptions of the sites and buildings in the Ministry's care. Special efforts have been made in recent years to make the monuments more widely known to the public and to encourage visits by schoolchildren, holiday makers and tourists from abroad as well as by those who have a special interest in archaeology.

The usual steps taken to preserve a monument are to free the remains of plants and trees growing in them, to remove debris, fallen masonry and modern accretions, and to consolidate what remains in sound condition together with any foundations revealed by excavation. The remains are made safe and weatherproofed, and unoccupied portions of the site are laid down to grass lawns. As a general rule there is no attempt at restoration of a monument to its original form and the work is confined as far as possible to the preservation of existing remains. Finds made during excavation are offered to national museums if of sufficient importance; otherwise they are usually preserved upon the site.

The Ministry seldom undertakes excavations at monuments not in its own care, and excavation is generally an emergency measure when remains are threatened with destruction. The Ministry may, however, permit excavations by qualified archaeologists at monuments which

have been listed, on condition that the results are published. Where, as happened frequently during the war, destruction or damage to earthworks or other monuments cannot be avoided, the Ministry arranges for exploration and records. In matters of excavation and research in general, the Ministry regards itself as exercising an administrative safeguard over the use of the available material rather than as a competitor in the field of archaeology. Any threat to a monument or building of value now finds no lack of enthusiasts for rescue operations. The Department has close and friendly relations with many organisations ranging from local antiquarian and archaeological societies to national organisations, particularly the National Trust and the National Trust for Scotland.

There are now over 5,000 monuments listed in England, 1,700 in Wales and 1,900 in Scotland. It is, however, certain that the present lists do not yet cover in a systematic way the whole of the more important monuments in the country and much yet remains to be done before this is achieved. One limiting factor is the amount of time which the Ministry's staff and the local archaeologists, to whose voluntary work the Ministry owes a great deal, can devote to the collection of the necessary information.

Nearly 600 monuments have been taken into the Ministry's charge in England, Wales and Scotland and many more could be had for the asking if funds were available for their repair and upkeep. Remains of the older classes of structure in good condition are comparatively rare. They are of greater archaeological value because they are often the only evidence of the architectural and technical practice of their period, but later buildings, which are commoner and may be covered by comparatively copious contemporary records, are often of greater public interest.

One difficult question is how far the scope of the Ministry's work should be extended to the new classes of antiquities which constantly arise for consideration, such as churches no longer in use, wind and water mills, and early industrial relics. If we preserve neolithic flint mines, why not nineteenth-century tin mines? The problem is no longer so much the prevention of destruction through ignorance and lack of interest, as the choice between the innumerable candidates for retention put forward by a historically conscious public, dismayed by the accelerating rate of social and technical change. Financial considerations, if no other, force a policy of selecting what is valued most among the heirlooms of the past. The preservation of ancient buildings is costly, and since the end of the war more than £2,000,000 has been spent by the Ministry on preservation, maintenance and custody of ancient monuments and historic Crown buildings, excluding expenditure on occupied buildings. Every year

the numbers of visitors increase but receipts from admission fees are only a fraction of the expenditure and the service can never be self-supporting.

THE UPKEEP OF BUILDINGS OF HISTORIC OR ARCHITECTURAL INTEREST

During the past thirty years there has been a tremendous growth of interest and appreciation on the part of the public in historic houses, and this has encouraged the Government to take more positive action to help private owners of occupied houses instead of confining action to ruins or to buildings in the possession of the Crown. Mention must be made of the interest taken by certain societies, of which the National Trusts are the most important. These Trusts, which are incorporated by statute, acquire and preserve for the benefit of the nation places of natural beauty or historic interest, but they are independent of the Government and they receive no systematic state aid. They depend chiefly on public subscription and their funds are limited. They may, therefore, have to ask the owner for an endowment for the upkeep of a building offered to them. None the less they now own many important country and town houses which usually continue to be inhabited while the public are admitted at stated times. The Trusts are also able to accept covenants from owners of buildings and land protecting them and their amenities from adverse developments.

The Society for the Protection of Ancient Buildings is a private body acting on lines similar to the National Trusts except that it has no statutory position. It owns a small number of ancient sites and buildings, but its main function is that of advising owners on the repair and treatment of their property. The Georgian Group is primarily interested in the preservation of buildings of that period. The Councils for the Preservation of Rural England and Wales are mainly concerned with safeguarding amenities and are only incidentally interested in the preservation of ancient monuments, in which none the less they do valuable work. The Pilgrim Trust has granted large sums of money over the last twenty five years for the preservation of buildings of beauty and historic interest.

Various bodies have been set up to keep records of important buildings. The chief of these are the three Royal Commissions on historical monuments in England, Wales and Monmouthshire, and Scotland, which were established by Royal Warrant in 1908 with the duty of making inventories of the ancient and historic monuments and constructions connected with, or illustrative of, the culture and conditions of life of the peoples of the earliest times. The Commissions prepare illustrated volumes containing detailed surveys county by

county, together with a general introduction to the antiquities of the area and recommendations for preservation. The inventories are very full and the principal monuments carefully described, surveyed and planned. So far about forty volumes have been produced.

Another recording organisation in England and Wales is the National Buildings Record, set up in 1941 as the result of a conference of learned societies promoted by the Ministry, in order to collect and make records of buildings of historic interest liable at that time to be destroyed or damaged by enemy action. The National Buildings Record is in the form of a public company financed mainly by a grant from the Ministry. The collections now include a great deal of information gathered by the Record; it has also compiled a central index including both public and private collections throughout the country. In Scotland this work is done by the Ministry. The Town and Country Planning Acts, 1944 and 1947, provided for listing 'buildings of special architectural or historic interest' and for their protection against summary demolition or alteration, and a great deal has been done during the past ten years to list buildings in most urban areas and many rural areas. But while these lists are of great value for planning purposes there was nothing in the Act giving power to arrest the deterioration of buildings in private ownership.

After the war many private owners found they could not maintain their properties or live in them, partly because of heavy arrears of maintenance and repairs due to the war, partly because of high taxation and the effect of death duties, and partly because of the high cost or shortage of the domestic staff needed for large houses and estates. Many houses fell into disrepair or suffered demolition and dispersal of contents. It became evident that the problem was made more acute by social and economic changes and that it could not be solved on the basis of existing legislation and in the almost complete absence of financial assistance. Moreover, there was increasing support for action among a public with a growing interest in history and architecture.

It was against this background that a committee appointed by the Chancellor of the Exchequer reported in 1950, recommending the formation of independent Historic Buildings Councils with power to make grants; the committee also recommended special reliefs from taxation to the owners of historic houses. The Government accepted the committee's analysis of the problem, but they were unable to accept in full the solution the committee suggested. In the outcome the Historic Buildings and Ancient Monuments Act, 1953, was passed, giving the Minister of Works power to make grants towards the maintenance and repair of buildings of outstanding historic or architectural interest and their contents and towards the upkeep of any

adjoining land, or to acquire them, or to assist local authorities or the National Trust to acquire them. Three Historic Buildings Councils, for England, Scotland and Wales, were set up to advise the Minister who is himself required to consult the appropriate Council before taking action under any of these powers. The secretaries of the Councils are officials of the Ministry and the Councils are able to draw upon the services of the Ministry's architectural and archaeological staff. They are required to submit annual reports to the Minister, which are laid before Parliament and published. Grants are usually subject to the condition that the owner will give reasonable facilities for the public to visit the house or grounds. A sum of £350,000 is available for grants in the year 1955-56 and £500,000 over five years for purchases.

The 1953 Act was passed primarily to help with the preservation of inhabited houses or buildings otherwise occupied or capable of occupation; accordingly structures such as ruins, earthworks, abbeys and castles continue to be dealt with under the earlier Ancient Monuments Acts. It would be wrong to think that this power to make grants ensures that all fine buildings can now be preserved. The Councils must wait for owners to ask for assistance and some owners do not wish to apply. Moreover the Councils and the Ministry have to keep to the terms of the Act and within the financial limits laid down; up to 1st March, 1956, the English Council received 952 applications and recommended a grant for 234 of them. The comparable figures for Scotland were respectively 163 and 73, and for Wales 74 and 20.

Unoccupied buildings present the Councils with a most difficult problem. It is undesirable, except perhaps in the case of a few buildings of quite exceptional interest, to preserve historic buildings merely as empty shells, and normally aid is not recommended for unoccupied buildings except as part of a scheme for bringing them into use. A use may be forthcoming for some buildings which have been unoccupied for many years if they are repaired, while others might be worth repairing if it was known that use would then be made of them. Both these possibilities are, however, usually somewhat speculative and often the one certainty is that an early decision must be taken to repair or not to repair before deterioration makes it too late. To find a use for most country houses is difficult because of their inconvenient planning and often remote situation, but in an effort to solve this problem the Ministry has set up a small Historic Buildings Bureau which brings unoccupied houses to the notice of persons and organisations in need of buildings. The natural and proper use of houses is to be lived in as homes, but there are various other possibilities. For instance, houses have been used for museums, for

public libraries and centres for music and drama, for lectures and meetings of societies, schools of various types, youth clubs and hostels, training centres for youth leaders and teachers, adult education centres and county colleges, university departments, rural community centres and centres for field research. There are also possibilities of conversion into hotels and flats, houses for old people, convalescent homes and even offices. Although these arrangements will not prevent the destruction of all buildings of value, the steps now being taken should prevent the loss of any really great architectural or historic houses. A great deal will still depend on the loyalty of old families towards their homes, on the willingness of institutions to consider putting old structures to new uses, on the sense of responsibility of local authorities, and on the interest and support of the ordinary public.

ORGANISATION

The Ministry's work on ancient monuments and historic buildings is directed by small administrative branches in London and in Edinburgh. The executive and advisory work is performed by an Architects' Branch and by the Inspectorate of Ancient Monuments. The Architects' Branch is responsible for making technical reports on buildings in the Ministry's charge, for recommendations on their treatment, and for carrying out the works of preservation. The immediate oversight of this work is the duty of Superintendents of Works with offices in different parts of the country. Under them are the foremen, charge-hands and skilled specialist workmen who work on the monuments. The architects carry out inspections of historic buildings on behalf of the Historic Buildings Councils. They may also give advice on the treatment of ancient monuments and historic buildings not in the Ministry's charge, when this is asked for.

The Chief Inspector of Ancient Monuments has a staff of qualified archaeologists who advise on all aspects of the work connected with ancient monuments and historic buildings. They keep in close touch with the architects and decide, in conjunction with them, what preservation work is to be undertaken and how it is to be carried out. They are also responsible for conducting excavations at monuments in the Ministry's charge, and on sites likely to be affected or destroyed by building or other development. There is a small laboratory to deal with finds from excavation, but research work is left to specialist organisations with whom the Inspectors have close contacts. The Ministry's photographic section helps with recording. Another part of the Inspectors' work is the scrutiny of plans for housing and similar developments, so as to ensure that ancient sites and buildings are not

needlessly interfered with. The guide books to ancient monuments are largely their work. With the growth of public interest in archaeology, the work of this small distinguished group of archaeologists has won increasing recognition.

PART FOUR

Relations with Industry

CHAPTER X

Building and Civil Engineering and Building Materials

The Ministry's policy — Assessing the load of work — Machinery for consulting industry — The Apprenticeship Councils — Building materials — The Works and Buildings Emergency Organisation.

*

THE MINISTRY'S POLICY

UNDER war conditions it was natural that the Ministry, with its knowledge of the building industry and with its own building organisation, should be given responsibility for controls over building and civil engineering operations. It was an obvious corollary that the industries supplying materials mainly for the building industry should be sponsored by the same Department, and the Ministry thus became the so-called 'production authority' for the main body of building materials. These include bricks, cement, sand and gravel, glass, slates, plaster and plaster products, salt-glazed pipes and sanitary earthenware. Steel and timber are used to a major extent by other industries and these materials were not brought under the Ministry of Works' wing.

By virtue of these controls and the need for planning the most economical use of both labour and materials, a close relationship developed between the Ministry, the building and civil engineering industries and the building materials industries. The association thus developed has rested on solid foundations of good will and confidence. Although controls have gone and conditions have become easier with better supplies of materials, the industries themselves as well as the Ministry have been anxious to maintain close and friendly relationships and to adapt to peace time conditions the consultative machinery set up during the war, instead of abandoning it. Accordingly several of the councils which were appointed during the war have been retained. On them representatives of industrial organisations and professional bodies meet together with the Minister, or with officials, to discuss matters of importance to the efficiency and development of the industry. The councils are not, of course, concerned with questions of wages and conditions of employment,

which are the business of the joint negotiating bodies of the industries themselves.

Many Departments have contacts with the building and civil engineering industries in connection with the programmes of work for which they are responsible, either directly or through local authorities. For example, in England and Wales the Ministry of Housing and Local Government is concerned with the housing, water, drainage and sewerage schemes of local authorities; the Ministry of Education is concerned with schools and the Ministry of Health with hospitals. In Scotland similar duties are undertaken by the corresponding Scottish Departments. Then the Ministry of Transport and Civil Aviation has responsibilities for roads, and the Ministry of Fuel and Power is concerned indirectly with the power stations and the construction programme of the nationalised industries. The building and civil engineering industries and the associated professions are engaged in all these activities, but each Department is interested in its own particular programme. The Ministry of Works is, of course, similarly concerned with its own programme of Government building, but in addition it keeps watch on the programme of building work in the country as a whole. The Ministry operates in Scotland as well as England and Wales, and by reason of its practical experience of building and engineering it is in a good position to take a comprehensive view.

There are solid reasons why, irrespective of party, any Government must take an interest in the well-being of the building and civil engineering industries, and the industries and professions associated with them. The building and civil engineering industries employ well over a million operatives—nearly ten per cent of the adult male population in civil employment. That number is far higher if all the building materials industries are taken into account. These figures are significant for any policy which aims at full employment. Moreover, these industries stand in a special economic relation to industry as a whole and to the economic life of the country. They account for about half the fixed investment, on which in turn depends the future efficiency of industry and transport. The more efficient the building industry the more building the country can afford.

Experience has shown, moreover, that the building industry and the size of its programme are a sensitive barometer of the trend of economic affairs. It is also claimed by some that if full employment showed signs of flagging the tendency could be checked by accelerating plans for new buildings in the Government programme and in the programme of local authorities, nationalised industries and other public authorities.

Another reason why any Government is bound to take a close

interest in the state of the industry is that about half of all new work is in what has come to be known as 'the public sector'; that is to say, it is paid for wholly or in part by taxes and rates or is carried out on behalf of the nationalised industries and other public bodies. Such work includes the Government's own building programmes, local authority housing and schools, hospitals, water, sewerage and drainage schemes, roads, town halls, public libraries, swimming-pools, and so on. Much more than half of all civil engineering is on public account. Once again, and more directly, the more efficient the industry the more building the country can afford.

The public, since the war, has grown increasingly aware of the role and importance of these industries. The enormous interest in new housing, the vast amount of repairs and reconstruction which followed the war, the frustrations and difficulties which for some years proved obstacles to satisfying many simple requirements, showed the public clearly the difficulties facing an industry which was reduced to the bare minimum during the war. The recovery made by the industries since the war has been helped by close collaboration between the many interests within the industries and by assistance, where needed, by the Ministry. It is therefore advantageous both to the industrial interests concerned and to the Government of the day that one Minister should be free to consider long term problems and the well-being and efficiency of the complex organisation which constitutes the building and civil engineering industries. It is at least equally important to have one Department which can keep in touch with those industries which supply the materials needed for all types of building work.

ASSESSING THE LOAD OF WORK

It is clear that for these purposes the Ministry needs to have a regular flow of information about the level of activity in the group of industries associated with building. This must include not only statistics of the industries' total output and labour force, but also an indication of the major types of work on which their resources are being used and, as far as possible, of their future commitments. This latter information can best be described as 'market intelligence'.

As a basis for collecting returns the Ministry maintains a register of firms in the industry, and takes various steps to discover both new firms that set up in business and those that close down. The register is also used by the Board of Trade for the Census of Production. The Ministry operates a statistical system which the industry itself has agreed is the minimum necessary for the Government's needs. Monthly returns give information of the men employed, and this is supplemented each quarter by returns of the total value of work carried out

according to different classes of building. The returns also show the resources directed to repair and maintenance work, a section of the industries' activities which at present occupies nearly half the building labour force. The employment figures collected by the Ministry of Works are supplemented by the figures, which the local offices of the Ministry of Labour collect, of the numbers of men unemployed and of vacancies outstanding in the building and civil engineering industries. Taken together these figures give a general picture of the current situation in the industries.

Though it cannot be said that all firms welcome the continuance of statistical returns after the abolition of controls, the industry in general recognises the need for adequate statistics and a very high degree of co-operation is forthcoming without recourse to powers which exist under the Statistics of Trade Act, 1947. The returns are analysed by the Ministry of Works and the resulting figures are published by the Central Statistical Office and in technical papers. Statistics are also collected regularly for many building materials and components by voluntary arrangement between the Ministry and the industries concerned.

Statistics alone are not enough for an intelligent interest in the trend of activity in an industry which is so highly sensitive to economic changes. Statistics take time to prepare and they deal only with the past. The Ministry and the industry need the best possible information both about the current position and about the future trends. This is as necessary at a time of full employment—when an excessive load on the industry in any part of the country may cause strain and delay in executing work—as at a time of falling demand. The Ministry is therefore developing consultations with the other Government Departments, local authorities, nationalised industries and other bodies with a view to obtaining advance information of building programmes and the dates when the larger schemes are likely to start. Conditions vary in different parts of the country and information obtained about national programmes is being supplemented by contacts at the regional level. In assessing trends of activity a system is being tried whereby account can be taken of current opinion and experience of those engaged in the industry and the professions so that this knowledge can be pooled for the information of all concerned. It is hoped that as this system develops even better results will be obtained. It is obviously very much in the interests of the industries that this should be so. From the point of view of the Ministry and indeed of the Government a great deal can be gained by direct personal contact with leaders of the industries through their representative organisations. The industries too gain by the opportunity of voicing their views when policy is being formulated and, at

all times, by having presented to them full information about the national building programme. These relationships are recognised and maintained through the consultative machinery which was established for the most part in the war years. In the following paragraphs this machinery is briefly described as it now operates.

MACHINERY FOR CONSULTING INDUSTRY

The National Consultative Council. In 1942 the Minister of Works set up an advisory council composed of representatives of the organisations of employers and of operatives in building and civil engineering and of the professional institutions of architects, surveyors and civil engineers. The council met frequently in the early days, when the problems confronting both the Government and the industry were more numerous than they are today. At a later stage, in view of the importance of housing, a representative of the National Federation of Registered House Builders was appointed to the council. The council, which is known as the National Consultative Council of the Building and Civil Engineering Industries, now meets at quarterly intervals. The Minister is President and both the Ministry and the industrial and professional organisations greatly value the opportunity which the council gives for exchange of views and discussion.

Regional Joint Committees. There is also consultation between the Ministry and the industry at regional level, through Regional Committees in England and a Joint Advisory Committee for Wales which meet under the chairmanship of the Regional Directors of the Ministry of Works. In Scotland a Joint Advisory Panel meets under the chairmanship of the Under Secretary of the Ministry in Scotland. At the outset, these bodies consisted of representatives of building and civil engineering employers and operatives, but in 1951 the membership was augmented by the addition of representatives of the professional institutions of architects, civil engineers and surveyors, so that the representation now corresponds broadly with that of the National Consultative Council.

Between 1946 and 1954 the regional committees were mainly concerned with questions arising from the control of the building and civil engineering programme, including the operation of building licensing. Now that building licensing has been abolished the principal function of the regional committees is to provide the Department with advice and information on trends of activity in the building and civil engineering industries, and the state of the building programme. They are also a valuable forum for discussion of matters of common interest to those engaged in the building industry in the area.

The Advisory Committee of Specialists and Sub-Contractors. This Committee was set up in 1945 under the chairmanship of a Deputy Secretary of the Ministry. It consists of representatives of the specialist and sub-contracting trades concerned with building and civil engineering work. The Committee works on much the same lines as the National Consultative Council, but the problems considered relate particularly to specialist and sub-contracting work. This Committee also has proved of great assistance to the Ministry and will continue to give advice to the Department on future trends and developments.

Plant Advisory Committee. This Committee was set up in 1946 by the Minister to advise the Government about the needs for contractors' plant. It comprises representatives of the civil engineering contractors, the builders, the plant hirers, the building material producers and the building and civil engineering operatives, as well as of the manufacturers and Government Departments concerned. In its early days it sponsored large programmes for the import of American machinery, including tractors of all sizes and large excavators for opencast coal. The Committee was also concerned in the development and expansion of British production of contractors' plant, to meet the rapidly growing needs of the civil engineers. Manufacture in this country has now reached a high level, and we are able to meet all our needs except for a very few types of equipment only produced abroad. There is also a substantial export of contractors' plant, almost entirely developed since the war. The Committee now meets comparatively infrequently, since the problems it was set up to deal with have largely been solved. A separate committee deals with imports of plant.

Work Overseas. Because of the importance of direct and indirect earnings from constructional work abroad, it was decided by the Board of Trade, in conjunction with the Ministry, in 1954, that steps should be taken to encourage an expansion of United Kingdom activities in this field and to provide assistance wherever possible in overcoming difficulties. For this purpose, and in order to provide a means of regular consultation, an Advisory Council on Overseas Construction was set up in June, 1954, composed of representatives of the four main organisations whose interests are directly involved, viz: the Association of Consulting Engineers, the Export Group for the Constructional Industries, the British Electrical and Allied Manufacturers' Association and the British Engineers' Association, together with the various Government Departments concerned. The Council found that there was a dearth of accurate information on the amount of construction work being carried out by United Kingdom

contractors overseas and this information is now being collected with the co-operation of the contractors. The value of overseas contracts has been expanding at a steady rate over the last few years and it has now reached a level of about £70,000,000 annually.

THE APPRENTICESHIP COUNCILS

The various councils and committees so far mentioned are consultative bodies, which meet under the chairmanship of the Minister, in the case of the National Consultative Council, or of senior officers of the Department at headquarters or in the regions. There are two councils concerned with apprenticeship and training which are more formally constituted and are in effect part of the machinery of the industry and associated professions. In each case the Minister appoints an independent chairman as well as members, appointed after consulting representative organisations, and assessors from Government Departments.

Building Apprenticeship and Training Council. The building industry is dependent upon adequate numbers of properly trained craftsmen, and it was recognised by the Government and the industry that special attention must be given to attracting new entrants and providing for their proper training through sound apprenticeship. This task was entrusted to the Building Apprenticeship and Training Council set up by the Minister of Works in 1943. Its membership comprises representatives from both sides of the industry and the main professional and educational bodies associated with it. The Council was asked to advise on all matters concerning the recruitment, education and training for craftsmanship and management in the industry. Its first recommendations led to the inauguration of a national apprenticeship scheme under which apprentices are given facilities for learning their craft under skilled instructors. This is supplemented by regular periods of training at a technical college. Wages on a graduated scale are paid throughout the five year apprenticeship, and on completion of the training the apprentice is entitled to a certificate which serves as his authority for craft status. All apprentices thus trained have their names recorded in a national register, and from the moneys received as fees for registration the Council has created a welfare fund for the provision of annual prizes and scholarships for degree and diploma courses to youths of outstanding ability. The Council has registered over 85,000 new apprentices since the national apprenticeship scheme was inaugurated in 1945 and has given over 3,000 annual prizes and 33 scholarship awards.

The needs of the building programme in changing circumstances

and with improved methods of construction have been surveyed in relation to craft requirements and the recruitment of additional apprentices. The Council can also take some credit for the increased attention which the industry is paying to the selection and training of foremen and supervisory staff. Gradually the industry itself has taken over the Council's functions on apprenticeship, including the register of apprentices and the arrangements for scholarships and prizes. The Council is now engaged in a general review of the needs of the industry in relation to new developments in technical education, with a view to a final report.

Apprenticeship and Training Council for the Electrical Contracting Industry. Electrical work on buildings is one of the specialist branches of the building industry, and in 1951 an independent Council was set up to deal with the needs of this industry. The Minister appoints an independent chairman and there are assessors from Government Departments; the members are drawn from the two sides of the industry. In electrical contracting there is little danger of the supply of suitable boys proving inadequate and the Council can devote its main activities to educational questions.

BUILDING MATERIALS

Government influence on production and distribution of building materials is now being applied in only the most general way in order to leave industry free to respond to market conditions. Factors in the development of future activity in the building and civil engineering industries are discussed at periodical meetings between officers of the Department and representatives of the National Council of Building Materials Producers. This Council was formed during the war with the primary object of representing building materials producers in discussions with the Government on general matters in which they have a common interest. It covers thousands of firms and includes about 40 associations or federations such as the Asbestos Cement Manufacturers' Association, the Cement Makers' Federation, the National Federation of Clay Industries, the Insulation, Building and Hard Board Association Limited, the Timber Trade Federation, to name a few. At the meetings with the Department problems are discussed which are common to all the producers—the general economic situation, the level of exports, investment policy, the level of building activity, fuel supplies, etc. Matters affecting any particular industry may have to be discussed separately with the industry concerned, but these meetings on a wider basis reduce misunderstandings and help Government and industry to co-operate to their mutual benefit. By having the best possible advance information the

producers are assisted in planning production so as to keep supplies steady. Similarly regular meetings are held with representatives of the Building Industry Distributors so that the Ministry can be kept informed of supply and distribution problems.

There are other indirect ways in which the Ministry assists the building materials industries. As a result of the Town and Country Planning Act, 1947, the Ministry of Housing and Local Government and the local planning authorities are responsible for controlling the use of land, but the advice of the Ministry of Works is sought when it comes to controlling the working of such minerals as sand, gravel, clay and gypsum, and to considering the effect of development plans on the building materials and fitments industries. Similarly the Ministry advises the Board of Trade on applications by these industries for Industrial Development Certificates under the Distribution of Industry Act. It also advises the various bodies concerned with the financing of industrial development. By these means a good deal is done towards ensuring that the necessary land, raw materials and finance are available to enable development to take place. Again, the Ministry has for some years co-operated with the British Standards Institution in developing standardisation of materials and fitments used by builders.

An interesting activity on the research side has been the setting up in 1955 of the Brick Development Association as a non profit-making company for the benefit of the heavy clay industry. The Association has the help of a sum of £145,000 which accumulated during the war from a levy on brick manufacturers who continued in production. The fund was created to compensate firms which had to close down when the industry was restricted under war conditions. The activities of the Association will be directed to promotion of research, development and education. The Ministry provides two of the directors.

The Ministry is also concerned to see that the materials industries sell as much of their products abroad as is consistent with adequate supplies to the home industry. There has been a steady growth in this export trade since the war, and exports of building materials now total over £70,000,000 a year.

The close association which the Ministry has established with the various trade associations and individual firms, as well as with the National Council of Building Materials Producers, enables it to discuss plans for future production, the effect of government controls on exports, matters concerning trade negotiations, tariffs, quotas, etc. Liaison with the Board of Trade is naturally very close in these matters, and the Ministry advises the Board of Trade of the possible effects on building materials of changes in import licensing policy. The attention of firms is drawn to possible new openings in overseas

D•

markets reported by Trade Commissioners and Commercial Attachés at posts abroad, and help is given over individual problems.

An outstanding example of the close co-operation of the Ministry and industry may be seen in the development of the export trade in prefabricated buildings, which has grown from a few thousand pounds in 1949 to several millions a year now. The industry, which had provided prefabricated houses for the special programme at the end of the war, found a new outlet abroad for its products and developed them with remarkable vigour. The Ministry as sponsoring Department allocated scarce materials, collected information for manufacturers, and helped with shipping problems. Unfortunately import restrictions imposed in a number of countries have had an adverse effect on the expansion of this trade.

WORKS AND BUILDINGS EMERGENCY ORGANISATION

A word must be said about the Ministry's preparations in relation to the building and civil engineering industries in case of war or other emergency. A Works and Buildings Emergency Organisation was originally set up with the voluntary co-operation of the industry, during the last war. By arrangement with the industry a similar organisation is available, if required, whereby contractors themselves arrange for the rapid and effective mobilisation of their joint resources in men, plant and materials to carry out urgent tasks such as demolitions, debris clearance and repairs to building and civil engineering works of all kinds. The organisation is based on regions, counties and local authority areas, and regional leaders, county leaders and area leaders are nominated. All are volunteers from the ranks of contractors, selected in consultation with the representative bodies of both sides of the building and civil engineering industries. They operate under the general direction of the Regional Directors of the Ministry, and the Emergency Organisation can if called upon ensure that the resources of even the smallest firms contribute to the exceptional efforts which the industries would be called upon to make. The Emergency Organisation has proved itself a valuable instrument of voluntary action in peacetime emergencies. This was clearly demonstrated in the disastrous floods which swept the east coast in January, 1953. The Organisation sprang into action and contractors were ready to drop what they were doing to undertake urgent coast defence and flood relief works; they brought organisation, ingenuity and resourcefulness to the aid of the stricken areas at very short notice.

CHAPTER XI

Building Research and Development

Research — The Technical Information Service.

*

RESEARCH

THE present activities of the Ministry of Works in relation to building research have developed from action taken during and immediately after the war in preparation for the revival of the building industry. Before the war ended it was evident that the country would be faced with an enormous programme of new building, repairs and adaptations, and that it would be essential to make the best possible use of limited resources both of men and of materials. The Ministry's first step was to collect and publish up-to-date summaries of scientific knowledge and practical experience in building, and organisations were set up to produce British Standard Codes of Practice and a series of *Post War Building Studies* which soon became a valuable source of information for architects, engineers and builders. The next step was to consider new methods of construction and to extend the field of research.

For many years the Government has taken a major interest in building research, and the Building Research Station at Garston, which comes within the Department of Industrial and Scientific Research, is the most important centre of building research in this country and probably in the world. The immediate post-war conditions raised problems which had hitherto been outside the scope of the Building Research Station, particularly in what had become known during the war as 'operational research'. This included such questions as site organisation, new construction techniques, mechanisation, and the economics of building operations generally. The Ministry appointed a Chief Scientific Adviser and a Scientific Advisory Committee which brought together scientists, professional men and builders. They found many gaps in the knowledge available and they were able to launch a considerable programme of operational research and development, including experiments under carefully controlled conditions, in housebuilding by various new methods. The work was done in close co-operation with the Building Research Station and in consultation with the industry.

By 1950 the Building Research Station was able to take over the

new fields of research and development that had been opened up. The Chief Scientific Adviser's Division was therefore disbanded and thereafter the Ministry has not had a research staff or research programme of its own, though experimental work has been carried out by the Ministry in connection with its own constructional work. The Ministry has, however, retained certain general responsibilities, notably for keeping under review all forms of building research and co-operating with the industry in efforts to improve building efficiency. In conditions today there is little prospect of the industry working itself out of a job; the problem is how to keep costs down by increased efficiency while maintaining the highest standards of quality in new building work. Hence the great importance attached to this side of the Ministry's activities.

The Minister is responsible for reviewing the whole field of building research and the co-ordination of research work in relation to the current needs of the industry; he is also responsible for reviewing and contributing to arrangements for making the results widely known and for encouraging their adoption, where appropriate, by all the different interests in the building industry. In undertaking these duties the Minister is guided by an Advisory Council on Building Research and Development which was set up in 1950. The Council includes representatives of employers and operatives in the building industry, members of the associated professions, scientists and others qualified to contribute to its work.

The task of reviewing building research, recommending priorities and suggesting new subjects for study is based on an annual programme of current research items, compiled through consultation with the Building Research Station and other branches of the Department of Scientific and Industrial Research—such as the Forest Products Research Laboratory, Road Research Laboratory, Fuel Research Station and Joint Fire Research Organisation, all of which carry out some research which is relevant to building. There are also programmes of work carried out by the Medical Research Council, certain universities, research and development associations and independent firms. All these are taken into account. In order that an annual programme may be compiled, all known research agencies with interests in building are invited to contribute. Over 400 items of research are now included; the work is divided between 40 and 50 different agencies employing at least 1,000 full-time workers with special professional and technical qualifications and experience. Professional institutions, employers' federations and other user interests are consulted by the Council about the content of the programme and are asked to comment on it with particular reference to priorities and suggestions for additional items.

The kind of research being carried out ranges from investigating the fundamental nature of materials and their behaviour in use, to studying the problems of the occupants of buildings as well as those of the designers, builders and manufacturers, and finding means of applying scientific knowledge to their solution. Long term research is not less important than short term research, but in general the main effort outside universities is applied to current problems.

Current research projects fall into four broad groups. The general heading of 'requirements' covers research concerned with the habits and requirements of people living or working in various kinds of buildings, their experience of the conditions, layout and equipment of the buildings, and the extent to which their requirements are being met. This research provides data with which designers can improve the layout of buildings, and their engineering services and other equipment.

Research on structures composes more than a third of all the investigations in progress, and more than half the organisations conducting research are taking part in it. Fundamentally their object is to obtain more information about what actually occurs in various parts of structures under different conditions of loading. Many of the studies are of a highly technical and mathematical nature. They are of great importance to designers because their main object is to save materials and reduce costs.

Research on materials and components is of wide interest because the results can often be directly applied by builders and by manufacturers at whose request some of the work is being done. Besides fundamental research into the properties of materials, current work includes studies of the behaviour of materials and components in use and the development of laboratory tests of their quality and performance; other studies aim at improving manufactured products and ways of using them.

The work being done in the fourth group of projects is of particular interest to builders. Some of it relates to the use of mechanical plant, including investigation of the jobs which various items of plant are required to do, and study of the design and performance of machines and of how site work can be organised in order that they may be used to the best advantage. The types of plant being studied include machines for excavating and boring, for concrete batching, mixing and compacting, mechanisation of finishes (such as plastering), and cranes for handling materials. Maintenance of plant is also studied, and special attention is given to the economics of mechanisation. Other projects in this group deal with productivity and costs, such as programming of building contracts, incentive schemes, and maintenance costs in houses; and there is a large scale study of the economics

of different systems of house construction for which houses are being specially built on several sites in collaboration with local authorities.

The full value of all this co-ordinated research can only be obtained if the results are quickly interpreted for practical application and widely adopted without delay. Although many large firms have the necessary technical resources, or use consultant services, much of the building programme is handled by medium and small firms which are not so well placed. There is inevitably a time-lag between the emergence of research results and their translation into current practice, and the Advisory Council is particularly concerned with reducing this time-lag. In some cases large scale trials involving considerable expenditure may be needed before the results can be tested. In other cases the time-lag can be reduced by publicity.

There are really two aspects of publicity for the results of research. One is to have a means of supplying information to those sections of the industry where there is already a demand; the other is to arouse interest in quarters where the possibilities of new materials and new techniques are little known and where efficiency is not as high as it might be. The professional institutions and the industrial organisations are active in bringing to their members' notice knowledge which can enable them to carry on their work more efficiently. The professional and technical journals are also a valuable medium for the dissemination of technical information. The Ministry is endeavouring in a modest way to supplement their work in the interests, particularly, of the small builder. The large firms employing thousands of men can look after their own interests and some of them have their own research units. But out of nearly 70,000 firms in the industry (other than one-man businesses) about 68,500 employ less than 100 men and collectively they account for 56 per cent of all those employed. The small building organisations are essential for the smaller contracts and their efficiency is important for the reduction of costs and the well-being of the industry as a whole.

THE TECHNICAL INFORMATION SERVICE

On the advice of the Research Council, the Ministry of Works Technical Information Service was set up in 1950. Its aim is to draw attention to the results of scientific research and development and to help individual firms both to identify opportunities for using up-to-date knowledge and to apply that knowledge to their own particular problems; it also helps to keep research organisations aware of local interests and difficulties. The scope of the service includes all matters of site organisation, costing, programming and progressing as well as methods of construction and the behaviour of materials. It does not,

however, expect to give the kind of advice normally obtained from professional consultants.

The measures undertaken by the Ministry through this service include the organisation of film shows, lectures and exhibitions, and the production of various types of publications. Much of the effort is primarily intended for small building firms, clerks of works, foremen and craftsmen.

The service is operated by Technical Information Officers at the Ministry's headquarters in London, Edinburgh, and Cardiff, and in each of the regions, with the guidance and help of a central unit in London. This central unit has access to the full resources of the Ministry's library and to the technical libraries of other Government Departments, of the professional institutions and of the main research organisations. The officers have built up and regularly maintain close personal relationships with specialists in the main research stations and in a number of private firms; they can also draw on the experience of officers in the Ministry's own Directorate of Works.

The Ministry started in 1949 a series of advisory leaflets, intended to give, in condensed but simple form, up-to-date and authoritative information about selected aspects of building; thirty-six had appeared by June, 1955. Total sales are now about one and a half million. The Ministry also participates in suitable commercial exhibitions. Each year since 1949 there has been at least one big exhibition where plant and other mechanical aids are demonstrated. The Ministry also helps with local exhibitions, encouraging local initiative and effort wherever possible. These exhibitions are usually held in conjunction with technical colleges and are designed to appeal to local visitors. The cost to public funds is small and the fact that the main responsibility rests with local organisations ensures interest and support from all sections of the building industry.

Every winter the Ministry organises, in association with the industry, the professions, and local education authorities, a programme of lectures covering a wide range of topics of technical and practical interest; they are also particularly designed to appeal to small builders, clerks of works, foremen and operatives. The lecturers include members of the Ministry's professional staff, officers of the Building Research Station, and representatives of other research agencies, development associations, the industry and the professions.

There is a large selection of films on building topics. Some have been made by Government Departments and others by industrial and commercial firms to illustrate sound modern practice. Recent films made at the Ministry's instance deal with cranes, mechanical handling, powered tools and handling of concrete.

It is estimated that each year exhibitions arranged by the Ministry

are attended by some 50,000 people, technical films are seen by over 40,000 and lectures are attended by 20,000, most of whom are active members of the industry. In addition to research work in Great Britain, the Ministry is associated with the work of certain international bodies having an interest in building developments, such as the European Productivity Agency of the Organisation for European Economic Co-operation. The Agency aims at increasing industrial productivity and improving economic welfare; the Agency regards building and construction work as fundamental to all attempts to improve the efficiency of industry as a whole.

Another important side of international co-operation is concerned with the use of American Counterpart Funds in this country; the Ministry looks after building interests in this field and is at present concerned in the execution of three projects financed in this way. The most important is an advisory service for the building industry on matters of management and organisation. These are subjects on which knowledge and experience are only obtainable within the industry itself. With the co-operation of the Ministry and substantial support from Counterpart Funds the National Federation of Building Trades Employers has undertaken this service and is now engaged in its development. The other two projects financed by these funds are films drawing attention to modern techniques, and the publication of short descriptive booklets for professional men and their clients on new developments.

PART FIVE

Organisation and Management

CHAPTER XII

Organisation and Staffing

The administrative function — The executive function — Headquarters organisation of administrative divisions — The executive divisions — Finance Division — The Directorate of Establishments — Scottish Headquarters — The Regional Organisation in England and Wales — Staffing — Staff relations.

*

THE Minister of Works is the parliamentary and political head of the Department and he is assisted by a Parliamentary Secretary.

The Permanent Secretary (who is also the Accounting Officer) is responsible to the Minister for the efficient working of the whole Department. The general organisation of Headquarters is shown in Charts I and II in Appendix II. There is a territorial organisation consisting of the Scottish Headquarters, eight Regional Offices in England and a Central Office for Wales. A typical organisation of a Regional Office is shown in Chart III.

There are five administrative divisions at Headquarters, each in the charge of an Under Secretary:

- Accommodation and Buildings A;
- Accommodation and Buildings B;
- Building Industries and Materials;
- Establishments;
- Finance.

In addition, an Under Secretary is stationed in Edinburgh in charge of the Scottish Headquarters.

There are also five executive divisions. In the Ministry the term 'executive divisions' is used to describe a number of groups, each with its own head, which are engaged broadly on operational activities. They are:

- Accounts Division;
- Contracts Directorate;
- Directorate of Works (comprising divisions under the Chief

Architect, the Chief Engineer, the Chief Quantity Surveyor, and the Director of Maintenance Services);

Directorate of Lands and Accommodation;

Supplies Division.

Some of these divisions are staffed mainly by professional and technical officers.

There is also an Inspectorate of Ancient Monuments, and the Bailiff of Royal Parks' Division.

The Ministry has no legal department of its own. In England and Wales the Treasury Solicitor acts for the Ministry, while in Scotland an Edinburgh firm of solicitors is appointed for this purpose. There is a great volume of legal work in connection with the Ministry's activities, but it is not highly specialised. The legislation which the Ministry has to administer raises few questions of interpretation as the statutory powers are for the most part in general terms. The Treasury Solicitor's Office is the central Government legal department and acts for a number of major Departments, including the Service Departments, which also have dealings in property and are concerned with contracts in building and civil engineering. The Ministry is, therefore, able to draw for its legal advice on the very wide experience of legal problems which resides in the Treasury Solicitor's Office. The need for separate arrangements in Scotland arises from the fact that the Scottish legal system, in particular Scottish land and property law, is different from that in England and Wales.

THE ADMINISTRATIVE FUNCTION

The administrative divisions, called more shortly 'administration', consist of administrative staff assisted by appropriate grades of executive and clerical staff in the normal civil service hierarchy. They discharge the same main responsibilities as in any other Department, i.e., advising the Minister on major questions of policy and ensuring that policy decisions once taken are effectively carried out. They do not interfere with the detailed professional and operational work of the executive divisions, but they are responsible for seeing that the approved programme is carried out, and for that purpose they co-ordinate the activities of the various executive groups. Thus, while within the Works Group the Director General of Works directs and co-ordinates the work of the architect, the engineer and the quantity surveyor, it is the job of the administrator to ensure that there is proper co-operation between the Works Group and other Divisions, such as Lands, Supplies and Accounts, who will almost certainly have to play their part in any programme. Administration decide the standards of maintenance, equipment and the like, determine what is

to be built, where, when and at what cost, and exercise general control of progress in the rate of building and of expenditure; the executive divisions carry out the programmes of work in accordance with general policy and within the financial limits laid down by administration.

THE EXECUTIVE FUNCTION

Within each executive division the various professional specialists are themselves grouped together under their own professional chief, e.g., the Chief Architect, Chief Engineer and Chief Quantity Surveyor, who is responsible for the professional standards to be followed and for the proper technical execution of the particular specialist type of work. Professional officers are assisted by technical grades, for example in drawing offices, and have clerical staffs to help with local financial control, establishments and contracts work, and generally to keep records for them.

The executive divisions provide professional advice to administration on the best way of fulfilling the requirements of other Departments; administration can then decide on the total programme and approach the Treasury for general approval of the necessary funds or for the approval of individual schemes, e.g., for new works estimated to cost over £30,000. Then, when approval in principle has been backed by financial authority, it is the executive divisions working together who carry out the work subject to administrative and financial control.

HEADQUARTERS ORGANISATION OF ADMINISTRATIVE DIVISIONS

Within two administrative divisions (*Accommodation and Buildings A and B*) the work is divided mainly on the basis of 'organisation by customer' or by the specific type of service, e.g., care of ancient monuments. A small general branch handles general policy questions relating to new works, maintenance, accommodation, equipment and services for buildings generally. It settles standards of office space and of furniture and furnishings, and supervises expenditure on a miscellany of important items such as maintenance, rents, compensation, furniture and removals. This branch also considers all legislation affecting the Ministry and settles general policy on lands questions.

Closely allied to the administrative division which deals with ancient monuments and historic buildings and with the Royal Parks are two small specialist groups, one of which is mainly advisory and the other mainly executive. This is a departure from the broad basic pattern of separate groups for administrative work and for executive

work, but it is indicative of the flexibility which is needed for the Ministry's work.

- (1) *The Inspectorate of Ancient Monuments* consists of a small group of qualified archaeologists who advise, in conjunction with the architects, on all questions concerning the treatment, maintenance and repair of ancient monuments in the Ministry's charge and of historic buildings. The functions of this inspectorate are referred to in Chapter IX. The basic organisation consists of four branches in London under the Chief Inspector. One deals with excavations and the others deal with ancient monuments in England and in Wales and with historic buildings in London. The Inspector for Scotland is stationed in Edinburgh.
- (2) *The Bailiff of the Royal Parks* is in charge of the organisation which maintains the Royal Parks in London and certain other open spaces. His duties have been explained in Chapter VII.

The *Building Industries and Materials Division* deals with the matters described in Chapters X and XI. There are three branches, each headed by an Assistant Secretary. One branch is concerned with the supply of building materials and fitments, facilitating overseas trade in these items, and maintaining contact with producers and distributors through their organisations. It also attempts to assess the load of work on the building and civil engineering industries and provides information and advice on requirements and supplies of contractors' plant, including imports and exports. It keeps in touch with other Departments concerned with the building and civil engineering industries—e.g., the Ministry of Labour and National Service—and with bodies such as the British Standards Institution on codes of practice for building and civil engineering.

Another branch is concerned with the work of the Building Research Advisory Council and the arrangements for bringing the results of research to the notice of the building industry and the associated professions. This branch also provides the secretarial services for the various councils and advisory bodies.

The third branch is concerned with civil defence and defence planning and deals with such questions as structural precautions in buildings.

THE EXECUTIVE DIVISIONS

The Directorate of Contracts. The Directorate of Contracts is responsible for the formation and administration of contract policy, for making and costing contracts arising from the Ministry's operations and for general oversight of regional contracts work. The Direc-

torate handles not only building contracts but also contracts for supplies of all kinds, and for various activities in the Royal Parks such as catering and the letting of chairs. The Directorate is organised in sections, each dealing with groups of services based either on the type of contract or the work of other divisions. It is manned mainly by executive and clerical grades. The headquarters staff amount to about 120, of whom 16 are professional and technical officers including qualified cost accountants.

The Directorate of Lands and Accommodation. This Directorate consists of professionally qualified estate surveyors with technical assistants and auxiliary clerical staff. The Directorate is responsible for acquiring land and premises for the public service at home and overseas by purchase or lease, for managing the Ministry's estate and for disposing of surplus land and buildings. It also handles the designation of land for future Government requirements under the Town and Country Planning Act, 1947, and settles compensation claims in respect of land and buildings requisitioned under emergency powers. The staff of the Directorate number about 280 in London, 50 in Scotland and 300 in the regions and Wales. The Directorate is also responsible for a staff of over 900 engaged on custody services, including night watchmen and caretakers.

The estate management functions of the Directorate are handled in three main branches (each under a chief estate surveyor); two of these are on a geographical basis, viz., London and the provinces, although there is within this grouping some slight specialisation by customer or service; the third, 'general', branch handles finance, common services such as compensation, opencast coal and salvage.

The Supplies Division. The Supplies Division has a total non-industrial staff of about 1,300, mainly in the executive and clerical grades, but it also has a strong contingent of technical staffs and, particularly in its stores, employs a large number of industrial staff, such as porters and drivers. The Division, under a Controller, is organised as follows:

- (1) Two branches for buying the wide range of goods and materials supplied, except fuel.
- (2) A furniture branch, which is technical, to cover design as well as inspection and renovation of furniture.
- (3) A stores and fuel branch 'of which one part controls all the stores and depots holding furniture and equipment ready for use or repair, while the other part arranges the purchase and supply of fuel and gives advice on its use to client Departments.

- (4) A general branch concerned with the financial control and establishment work within the Supplies Division.

The Directorate of Works. The largest and most important executive division is the Directorate of Works, which is responsible for the execution of all the Ministry's building construction and maintenance programmes. This Division has a non-industrial staff of 6,500, about half of the Ministry's total: 1,100 of these are professional officers, 4,100 technical officers and 1,300 in the executive and clerical grades.

The Director General in charge of the organisation is a professional officer. The Directorate is organised on a functional basis corresponding with the three main professional groups employed, viz., architects, engineers and quantity surveyors. Certain specialised branches, e.g., structural and sanitary engineers, are attached to the architects' group. There is also a Director of Maintenance Services who is responsible for the co-ordination of maintenance work. In addition, the Works General Branch provides all clerical and office services.

The Chief Architect's Division is responsible for the design and supervision of all building and allied work undertaken by or for the Ministry, for the maintenance of ancient monuments in this country and of public buildings overseas, and for the determination of technical standards for building construction and maintenance. It is divided into four branches—architects', structural engineers', sanitary engineers' and chief works engineer (site control). The functions of the first three branches are self-explanatory, but an interesting feature is that the two specialist groups of engineers are allied for practical purposes with the architects to whom they provide specialised professional advice. The Chief Architect's Division has also a General Section which acts as a technical information centre for the Ministry's architects and surveyors on all building matters, standardises technical specifications, designs standard fittings, and advises on faults and failures in buildings and on such problems as acoustics, insulation, and dry rot. The Chief Works Engineer (Site Control) Branch supervises constructional work on behalf of architects and surveyors and controls the activities of clerks of works and other staff who are engaged in the immediate supervision of building and civil engineering constructional works. It is naturally a very widespread organisation with most of its staff on the building sites, either in this country or abroad.

The second main division—that of the Chief Engineer—is responsible for the engineering design and for the supervision of the installation of a wide range of engineering services and plant in new and existing buildings. These buildings include the research establish-

ments of the Ministry of Supply, the Department of Scientific and Industrial Research and other Ministries. It maintains a technical servicing section for general engineering work within the Division, with specialist sections dealing with such matters as illumination and water treatment. The Division provides every type of engineering service for all the different kinds of buildings in the Ministry's charge in this country and abroad, from the local office to the Royal Palaces, from the fountains in Trafalgar Square to aeronautical research establishments.

The third main division, under the Chief Quantity Surveyor, is responsible for the preparation of estimates, schedules of rates and bills of quantities, the examination of tenders, the valuation of work done for interim payments to contractors and the agreement of final accounts. This division negotiates the settlement of claims arising out of contracts and settles dilapidation claims on leased premises and compensation claims on properties derequisitioned. It provides data for cost analysis and prepares such analysis for building and civil engineering work.

The Director of Maintenance Services is the professional officer responsible for the general management and the operational control of maintenance services at the buildings in the Ministry's charge, except for such special services as ancient monuments in this country and embassies abroad, which are the responsibility of the Chief Architect's Division. He deals with such questions as organisation, numbers of staff in relation to load of work, direct labour, depots, stores, ratios of costs to work and load, and general efficiency. He is in general control of two branches, Maintenance Surveyors' and Maintenance Engineers', who maintain the Ministry's buildings, adapt or alter them when required and may erect new buildings when such work is allocated to them by the Chief Architect.

The Chief Maintenance Surveyor and Chief Maintenance Engineer are responsible to the Chief Architect and the Chief Engineer respectively on purely professional and technical matters, and a close working relationship exists between the professional staffs engaged on maintenance and their colleagues on new works. The organisation of maintenance work is referred to in Chapter XIII.

Finally, within the Directorate of Works, is a Works General Branch which provides clerical services for all the professional and technical staff of the Directorate of Works at Headquarters and overseas, and in district and depot offices. This branch deals with matters of pay, establishment, finance, estimates and progress information. Its services are invaluable to the professional staff who are thereby relieved of a great deal of essential but non-professional work.

There are special staffing problems in the Directorate General of

Works due to fluctuations in the load of work and changes in its nature which demand flexibility in the working arrangements throughout the various divisions. The staff numbers are kept at a fairly constant level and additional help is obtained from outside professional and technical sources when the work is exceptionally heavy. For example, private architects are nominated for limited and, occasionally, full commissions; sometimes the commission is confined to the employment of drawing office capacity but in large public building work an architect may be nominated on full commission.

In structural engineering additional help is obtained from private consultants, sometimes to work direct to the nominated private architect.

The Ministry of Works has for a long time adopted the practice of having bills of quantities prepared by nominated quantity surveyors, and in recent years, due to the increased load for the staff available, re-measurement work and adjustments of variations for final accounts have also been given to outside nominated quantity surveyors.

The professional and technical staff of the Ministry undertake a good deal of advisory work to other Departments, and the Ministry is also represented on many bodies connected with the professional institutions, such as the Architects' Registration Council, as well as various research organisations.

FINANCE DIVISION

The system of financial control is described in Chapter XIII. The Finance Division is headed by an Under Secretary who is in charge of a Finance Branch and an Accounts Division. The Finance Branch, under an Assistant Secretary, is responsible for general financial questions and for financial practice designed to meet Parliamentary and Treasury requirements. Its duties include the co-ordination of the annual estimates and liability statements (except the establishments estimates) and the preparation of the annual appropriation accounts.

The Accounts Division is headed by a Comptroller of Accounts. Its duties are the examination and payment of all accounts, the recovery of monies due to the Department, and the maintenance of the financial records.

THE DIRECTORATE OF ESTABLISHMENTS

The Directorate of Establishments is primarily responsible for staffing, organisation and office management, and also for the provision of those common services which are necessary to enable the Ministry to function smoothly and effectively. The Director of

Establishments (an Under Secretary) controls the staffing of all parts of the Ministry and all related matters which affect expenditure on the establishment, and he negotiates direct with the Treasury on these subjects. The Directorate of Establishments is organised in five main branches, four being under Assistant Secretaries and the fifth under a Chief Information Officer.

There are three 'personnel' branches dealing with recruitment, transfer, promotion and other related questions for professional and technical grades, for administrative, executive and clerical grades and industrial staff, and for typists, messengers, cleaners and minor grades. Each of these branches also carries additional responsibilities: thus the first branch is also responsible for the establishment estimate and for superannuation work; the second branch for the policy, estimates and financial control of the Ministry's transport organisation, including the Government Car Service; and the third branch controls and provides the Ministry's common services such as stationery, printing, photographic and photoprinting services, the registry system, typing, training, welfare and the library.

The library has an impressive range of books, pamphlets, periodicals and trade literature on building and related subjects, and a large collection of photographs of ancient monuments and historic buildings. Of great interest, too, is the large collection of books on subjects of historic interest with which the Ministry deals, and a collection of old plans and prints, many of which are of historical importance. Thus the library provides a valuable source of reference and information for all the Ministry's staff, especially the professional and technical officers. Its resources are supplemented by contacts with other centres of information including the libraries at the research stations of the Department of Scientific and Industrial Research, and the National Central Library. There is a small technical library in each of the Ministry's regional offices and at Edinburgh and Cardiff.

The Ministry's transport organisation is under the executive control of a Controller of Transport who is responsible for the maintenance of a fleet of some 700 commercial vehicles, the majority of which are allocated to user divisions (mainly the Controller of Supplies and the Director of Maintenance Services) for the transport of Ministry-owned goods. He is also responsible for arranging transport for goods purchased ex-works and for the running of the Government Car Service, which provides a pool of about 350 cars, some chauffeur-driven, for the use of Ministers and senior Civil Servants. The Ministry's vehicles are maintained partly in the Ministry's own transport workshop and partly in commercial garages. The Controller is assisted by technical officers who are responsible for the maintenance of the Ministry's vehicles, by a Chief Officer who is

responsible for welfare, discipline and other establishment matters affecting the women drivers of the Government Car Service, and by executive and clerical staff who maintain cost accounts and expenditure records. The transport organisation operates on a decentralised basis in each region under the control of a transport officer who is part of the regional organisation. There are comparable arrangements in Scotland and Wales.

The fourth side of the Directorate of Establishments consists of the Organisation and Methods and Establishment Survey Branches which advise on organisation and methods within the Ministry, and survey the Ministry's organisation with a view to promoting greater efficiency and staff economy.

The fifth branch, under the Chief Information Officer, is responsible for public relations. This branch is organised in three sections:

- (1) The press office, which covers the presentation of the Department's work to the general public, maintains contact with press, radio and public relations organisations, and helps to keep the Department informed of public opinion.
- (2) An exhibitions section, which arranges exhibitions, films and displays in connection with the Department's services for the building and civil engineering and building materials industries.
- (3) A section for editing technical publications.

SCOTTISH HEADQUARTERS

For many years administrative officers have been stationed in Edinburgh and in 1935 the Office of Works set up an administrative branch, as distinct from its executive district offices, following the establishment of a separate office in Edinburgh for the Secretary of State for Scotland. The size of this Scottish Headquarters has progressively increased with the general tendency towards decentralisation, the re-organisation of the Scottish Departments of State in 1939, and the general expansion of the Ministry's functions. Nearly all the functions of the Ministry in Scotland are carried out by the Scottish Headquarters, subject to conformity with London Headquarters on matters of general policy affecting the United Kingdom as a whole. The questions affecting the United Kingdom as a whole, which are dealt with entirely in London, include standards of office and other accommodation, standards of furniture and equipment, the co-ordination of annual estimates, and investment programmes. The London Headquarters are responsible for general policy in relation to the building and civil engineering and building materials industries. Also certain establishment functions such as promotion, superannuation, the posting and transfer of staff, and the preparation

of codified instructions are dealt with in London on a United Kingdom basis.

The Ministry's organisation in Scotland, under the control of an Under-Secretary, consists of an administrative division with an establishment section and contracts branch; a works division consisting of architects, surveyors, engineers and quantity surveyors under a Director of Works and Services; a lands and accommodation division under a Superintending Estate Surveyor; a supplies branch under a chief technical officer; and a stores section. There is a separate accounts branch responsible to the Comptroller of Accounts in London. District offices in Edinburgh, Glasgow and Aberdeen, with sub-offices at Dumfries, Dundee and Inverness, carry out the day-to-day business of the Ministry connected with the provision and maintenance of Government premises in their areas, under the general control of the staff in Edinburgh. The total non-industrial staff is about 1,000, of which more than half are in Edinburgh, one-fifth in Glasgow, and the rest at the various district and local offices. About 1,000 industrial staff are directly employed on maintenance, repair and small alterations to Government buildings in Edinburgh and Glasgow, and on maintenance of Royal Parks.

The relations between the Ministry's London and Scottish Headquarters provide one of the most complete and successful examples of delegation in a Ministry which has carried these principles as far as any other Government Department. No members of the London Headquarters staff are engaged solely on the Ministry's work in Scotland, though the various London staff engaged in dealing with the common services and general policy of the Ministry always bear the interests of Scotland in mind, and are careful to consult the Scottish Headquarters on all matters of common concern. Administrative and professional officers from Scotland attend the periodical conferences in London of the Ministry's senior officials. They also co-operate closely with London Headquarters in the preparation of the annual estimates. But once the total provision is agreed for each service, the Scottish Headquarters are free to execute and control their building programme themselves, though they supply London with monthly statements of expenditure. The Scottish Headquarters enjoy the full financial powers delegated to the Ministry by the Treasury, with whom they correspond directly, and only matters of major importance are referred to the Deputy Secretary in London.

THE REGIONAL ORGANISATION IN ENGLAND AND WALES

Before the 1939-45 war, and indeed as long as the Department has had Government buildings in the provinces to look after, there has

been a provincial organisation of outstationed professional and technical staff responsible for dealing with local accommodation matters for other Government Departments and with the maintenance of Government buildings. New constructional works were all undertaken direct by Headquarters. The professional officers in this field organisation were subject to control by their own professional Directorate. Then, as now, the unit of organisation was a geographical area known as a 'district', with its own professional head and supporting technical and clerical staff. Thus there were district surveyors, district engineers and district estate surveyors, and co-ordination rested mainly upon the district surveyor. Administration and establishments work were entirely centralised.

During the war this organisation was strengthened by appointing a senior regional officer, but with the increase in work and the responsibilities for the control of building operations it was decided in 1945 to adopt the regional form of organisation for carrying out the work of the Ministry outside London. The districts in England were grouped together within Regions which, with the exception of London, had the same boundaries as those used for civil defence purposes. Each Region, under a Regional Director, included two or more districts of each professional group. Wales constituted one Region, but services in London, except building licensing, continued to be run from Headquarters. The South Eastern Region, with regional headquarters at Tunbridge Wells, was eventually re-absorbed into the Headquarters organisation for reasons of economy; in both London and the South Eastern area the district field organisation below the regional level continues to function.

The functions of the Ministry in a typical Region are in most cases the same as those of Headquarters, carried out on a smaller, though still impressive, scale. The Region designs, erects and maintains buildings, though the larger new works are still run from Headquarters, especially if they call for specialised knowledge; it is difficult to organise all new building work on a regional basis owing to fluctuations in the load of work and to staffing problems. The Regions are not responsible for work on ancient monuments and historic buildings, though Regional Directors assist in the publicity arrangements. Apart from fuel, the purchasing and stores arrangements, except for small purchases of non-standard items, remain under central control. In 1955-56 the total budget for Wales and the Regions in England was £3,330,000 for new works and £7,170,000 for maintenance work, £1,100,000 for furniture and equipment, and £1,430,000 for fuel. The regional non-industrial staff consists of about 4,500 persons.

As explained in Chapter X, the Regions keep in close touch with the building and allied industries in their territory; they keep a register

of building and civil engineering firms and they handle the statistics recording activities in the industries with which the Department is associated. The Regional Director is Chairman of the Regional Joint Committee, on which both sides of the industry and the professions are represented, and he acts as representative of the Department in regional affairs, including membership of the Regional Board for Industry.

Originally each Region was organised on the basis of six main branches, but these have now been reduced to four, and in some cases to three, each under an Assistant Regional Director. An administrative branch is responsible for administration, contracts, establishment, training and welfare, and transport; a works branch co-ordinates the work of architects, surveyors, engineers and quantity surveyors; and a lands branch is concerned with negotiations for sites and arrangements for leases, and with the use of existing accommodation. In large Regions the work in connection with the building industries and with technical information is handled by a separate branch; elsewhere it comes within the administrative branch. There is also a regional accounts branch, directly responsible to the Comptroller of Accounts, which provides a service to the regional office, of which it is an integral part.

The works and lands branches are divided into two or more districts, which are responsible to their respective regional chiefs, are staffed by professional and technical staff and are co-ordinated exclusively by the district officer concerned, i.e., district surveyor or estate surveyor. In many cases the districts operate from the regional office, either because work is concentrated in its vicinity or for reasons of economy in staff and accommodation. Some staff are, however, dispersed through the Region at buildings of particular importance or in areas having a sufficient volume of work, and on individual sites where building is in progress.

The Regional Director is responsible for the efficiency of his regional organisation and for financial control within his delegated powers. He does not, however, give directions on purely professional and technical matters; in these matters the Assistant Regional Director (Works) and Assistant Regional Director (Lands) are responsible to their professional chiefs at Headquarters. For example, on questions of design, standards of construction and types of material to be used, professional officers in the Regions are guided by their professional chiefs at Headquarters. On the other hand, the Assistant Regional Directors are responsible to the Regional Director for the general management of their professional and technical staff.

Each Region calculates its financial needs and makes up an annual

budget to cover them. The Regional Director has delegated financial powers to spend within this budget, without reference to Headquarters, up to £10,000 on individual new works for items of maintenance, and up to £2,000 on the purchase or sale of individual sites, to take leases costing up to £5,000 per annum or to let for rents up to £2,000 per annum, and to issue, repair or replace furniture at a cost of up to £10,000 for a single occupying Department. These powers indicate the high degree of confidence placed in the regional officers. Within these financial limits the Regional Director is free to proceed entirely on his own responsibility with the programme outlined in his annual budget, except for the need to comply with Headquarters policy. A close watch is kept on the progress of expenditure in each Region throughout the year so that adjustments can be made between Regions, or between Regions and Headquarters, within the total Vote for the service for Great Britain.

Ten years' experience has confirmed the great practical advantages of this form of organisation, and a high standard of co-ordination in the Regions has been greatly assisted by having a Regional Director who is the acknowledged leader of the team. The Regional Director must also look outwards both to those Departments for whom the Ministry provides services and to the representatives of the building and civil engineering and building materials industries. It is a great advantage to these outside interests to be able to discuss their problems and proposals with someone who can cover practically all aspects of the Ministry's work in the Region and take decisions in the light of local conditions.

STAFFING

In the Ministry there are about 13,000 non-industrial staff employed whole time, and 16,000 industrial staff. The non-industrial group consists of the usual Treasury Grades of administrative, executive and clerical staffs, together with a large number of specialists in the professional and technical groups.

At 1st March, 1956, the non-industrial staff total was made up as follows:

					%
Treasury Grades:	Administrative	80			
	Executive	868			
	Clerical	3,047			
		<hr/>	3,995		30
Professional Grades:	Professional	1,515			
	Technical	5,235			
		<hr/>	6,750		51

			%
Other Grades:	Typing	699	
	Minor	1,886	
		<hr/>	
		2,585	19
		<hr/>	
	A total of	13,330*	
		<hr/>	

Geographically, the staff by grades were distributed as follows:

	<i>Headquarters</i>	<i>Scotland, Wales and Regions</i>
	%	%
Treasury Grades	19	11
Professional and Technical Grades	30	21
Typing and Minor Grades	10	9
	<hr/>	<hr/>
Total	59	41
	<hr/>	<hr/>

STAFF RELATIONS

Staff associations representing various grades of staff are recognised nationally for negotiations on pay and conditions of service. These associations have departmental branches which negotiate mainly with the personnel branches of the Directorate of Establishments on matters concerning all their members. In addition, there is day-to-day contact between staff associations and the Directorate regarding individual members or groups of staff. There are, however, many domestic matters of general principle and of common concern to the Department and staff which are outside the province of any one association or personnel branch. Where, for example, redundancy arises, the order of discharge of staff follows certain general principles on which staff associations are consulted and have the opportunity to make suggestions; principles can then be applied with the assurance that they are generally understood and accepted as being fair. These arrangements owe much to the co-operation of the staff's representatives, and although the number of staff has been almost halved during the post-war years there has been a minimum of friction.

*This includes some part-time staff, mostly in the minor grades.

The redundancy agreement is an example of the work of the Departmental Whitley Council. This is a joint body of official and staff side representatives which is concerned exclusively with non-industrial staff. The Permanent Secretary is chairman and the official membership includes the Director of Establishments and the heads of the executive divisions and a representative of the Regional Directors. Regional Whitley Committees deal with matters within the authority of each Regional Director.

The main Council meets about four times a year. Under its direction a small joint standing committee, under the chairmanship of the Director of Establishments, meets whenever necessary to deal with general matters; various other committees cover such subjects as training, welfare, redundancy and promotion procedure. The Council has also appointed a Joint Manpower Committee which supervises a staff suggestions scheme. The purpose of this scheme is to encourage staff in all grades to suggest ways of improving efficiency; nearly 300 of the many suggestions submitted have been accepted since the scheme was started eight years ago. Many of these involved improvements which, though small in themselves, resulted in the aggregate in useful savings; some have, in themselves, brought substantial economies either in the office or in the outside work of the Ministry.

It is the essence of Whitleyism that formal machinery should not supersede day-to-day co-operation between staff and management, or relieve heads of divisions and supervising officers of their responsibilities. The great majority of negotiations are quite informal discussions between two or three people, and agreements are frequently reached between the secretaries of the official side and staff side without the need for reference to the Council or its committees.

CHAPTER XIII

Some Aspects of Organisation and Management

Finance and control of expenditure — Contracts — Requirements for new buildings — The maintenance of buildings — Directly employed industrial staff — Buildings overseas — Managing the Ministry's properties.

*

FROM what has been said of the Ministry's work and organisation it will readily be appreciated that co-ordination and control are a major problem. Moreover, where expenditure of public money is involved, the need to avoid delays and to ensure smooth working between different interests is all the more imperative. The smallest building job calls for co-operation between the various professions and services, and the vast scale of the Ministry's operations calls for team work of a high order between administrative, executive, professional and technical staff in many divisions at Headquarters and throughout the country and overseas.

The various parts of the organisation are linked together by well-established procedures and practice so that each officer should know exactly where his responsibility begins and ends. Too much reliance must not, however, be placed on written codes of instructions as they tend to introduce rigidity where common sense may be the best guide to action, and the Ministry relies chiefly on personal contacts between officers working together in a team. These contacts are established at all working levels, and junior officers in each group recognise that they are acting for the head of their division at Headquarters, or for the Regional Director, and that they must keep their senior officers informed of progress or of difficulties in the way of progress. This corporate experience of officers working together at all levels is the foundation of success in carrying out the Ministry's work with the greatest efficiency and at the minimum cost.

The Permanent Secretary holds meetings with heads of divisions at which a wide range of management questions are discussed, particularly those affecting organisation and staffing, and relations

between divisions. The planning of works programmes, the progress of work and the rate of expenditure are kept under review at regular meetings at which decisions can be taken and instructions given with a minimum of written reports. The Director General of Works holds weekly meetings with his professional chiefs to review programmes in the United Kingdom and overseas at both the pre-contract stage and the building stage. Each head of division similarly brings together his senior staff who are concerned with a particular part of the programme.

As regards the Regions, the Permanent Secretary takes the chair at a monthly meeting of Regional Directors for the dual purpose of keeping Regional Directors fully informed of Headquarters policy and consulting them about the practical application of policy in the field. In addition the Assistant Regional Directors attend periodic conferences at Headquarters with administrative or professional heads of divisions. Another important link in maintaining close contacts between Headquarters and regional staff consists of visits by senior staff to the regional offices.

It is not possible to describe in detail all the different relationships between the administrative divisions and professional, technical and executive staff at Headquarters and in the Regions, but for the purpose of illustrating how problems of management are dealt with in the Ministry a few activities are selected as being of more general interest.

FINANCE AND CONTROL OF EXPENDITURE

The Votes. Finance plays a large part in the affairs of the Ministry. It affects relationships with other Departments, as well as relationships between the different divisions within the Ministry. The amount of work which can be done and the time at which it can be done depend on funds being available.

The Ministry of Works Estimates are part of Class VII of the Civil Estimates and are divided as follows:

- Vote 1. Ministry of Works (staff costs, travelling expenses, incidental expenses, payments for agency services).
- „ 2. Houses of Parliament Buildings.
- „ 3. Public Buildings, United Kingdom.
- „ 4. Public Buildings, Overseas.
- „ 5. Royal Palaces.
- „ 6. Royal Parks and Pleasure Gardens.
- „ 7. Historic Buildings and Ancient Monuments.
- „ 8. Miscellaneous Works Services.

During the financial year 1955-56 these eight Votes provided for

estimated gross expenditure of nearly £50,000,000, towards which receipts of over £11,000,000 were authorised to be appropriated in aid of the Votes. This expenditure is nearly all directly incurred by the Ministry and, unlike some other Departments, very little is in the form of grants to local and other authorities. This is by no means the whole picture, for in the same year a total of nearly £50,000,000 was included in the Estimates of other Departments for work to be done for them by the Ministry of Works on repayment terms.

There is no simple rule which determines whether the Ministry provides its services free to other Departments, i.e., the cost is borne on the Votes mentioned above, or whether the Ministry recovers the cost, which is then borne on the Votes of the Department concerned. Where the Ministry is directly responsible for a service, such as office accommodation and supplies, the position is clear; the cost falls on the Ministry's Votes. But the Ministry's Votes are also charged with the cost of research buildings for the Department of Scientific and Industrial Research, the Agricultural Departments and the Ministry of Fuel and Power. On the other hand, work for the Service Departments and the Ministry of Supply is carried out on repayment terms, the cost being fully recovered plus a percentage charge (now $12\frac{1}{2}$ per cent) to cover overheads. This distinction in methods of financing is of practical importance in the administration of the various programmes, as the degree of responsibility on the Ministry varies according to the financial basis on which the work is done, though in all cases a complete technical service is provided.

Where the cost of the work is met by the Ministry from its own Vote, the Ministry must satisfy itself that the work is justified, obtain Treasury authority for the work to proceed, and obtain Parliamentary approval through the submission of estimates. Also the Ministry of Works is answerable in the House of Commons for the work done. With repayment services, however, where the Ministry is acting as an agent, it is the 'principal Department' which is responsible for the policy behind the expenditure and for defining its requirements. That Department must agree an estimated cost before the work is started and obtain all the necessary authorisations for the expenditure. On the other hand, even for these services the Ministry of Works has greater responsibilities than those of an agent as that term is generally understood in commercial practice. The service given includes the design of buildings and plant, the choice of contractual methods and the supervision of the work as it proceeds. It is the duty of the Ministry to ensure that expenditure does not exceed the sum authorised by the principal Department and that in certain types of buildings, such as offices, canteens and houses, the standards of space and equipment comply with those generally adopted. The Ministry is wholly charged

with the exercise of economy and efficiency in meeting the stated needs, and the Ministry's Accounting Officer must answer for any failure on its part to carry out its obligations. These duties were defined in a Treasury minute dated 4th January, 1951, commenting on the Fourth Report of the Committee of Public Accounts, Session 1950.

Responsibility for Control. The Permanent Secretary is the Accounting Officer of the Ministry and is responsible for seeing that no money is spent except as authorised by Parliament, and that all sums due are collected. The Permanent Secretary is aided by the Under Secretary for Finance, who keeps a general watch on expenditure and is consulted by administrative and executive divisions on all matters involving financial policy and accounting. The Finance Division does not initiate expenditure, nor has it the primary responsibility for financial control. These are among the duties of the administrative divisions. These divisions decide what provision should be made for particular services in the draft annual estimates; they authorise and instruct the executive divisions to undertake works; and they are responsible to the Permanent Secretary for controlling all the expenditure incurred on the services they administer. Administrative divisions may either authorise expenditure under the Ministry's delegated powers, or obtain authority for expenditure outside these powers from the Treasury. The Under Secretary in charge of the Scottish Branch carries the full delegated authority of the Ministry and he corresponds direct with the Treasury on financial aspects of particular schemes. The Regional Directors in England and the Director for Wales have more limited powers to authorise expenditure, and they do not correspond with the Treasury.

The Ministry's financial organisation differs from that normally adopted by most other spending Departments. Usually a Principal Finance Officer determines what money is required for various services, is responsible for the examination of all proposals involving expenditure, and acts for his Department in dealings with the Treasury. This difference of function between administration and financial control would be highly artificial if applied in the Ministry of Works because in its administrative work considerations of finance and policy are inseparable. The Ministry is not normally in a position to influence the basic requirements of other Departments, e.g., for a post office in a particular town or a laboratory to conduct a particular type of research. It has, however, to satisfy the other Departments' needs while keeping costs within reasonable limits. One of the chief concerns of the administrative divisions is therefore, with the advice of professional staff, to agree schemes with other Departments and

obtain the approval of the Treasury where necessary. In the evolution of an agreed scheme considerations of cost and standards are inextricably intermixed. When the scheme has been agreed and authority given for work to start, the executive divisions are responsible for doing the work. The view taken is that financial control over the work of the executive divisions can best be exercised by the administrative staff who handle the particular case and service throughout, instead of turning over the business at a late stage to the staff of a Finance Division who have not been concerned with all the negotiations. The executive divisions are thus subject to a single instead of a double control, while the Department for which the service is given is able to deal throughout with the same officers of the Ministry who are familiar both with all the stages of the particular scheme and with the general needs of that Department.

The Estimates. The settlement of the annual estimates, covering innumerable buildings and services in all parts of the world, involves an immense effort of planning and co-ordination throughout the Ministry. This takes place throughout the financial year, but is at its most intense during the winter months, when data have to be prepared and examined at all levels. During the year expenditure on each service has to be carefully watched and controlled by both the executive and administrative divisions. The Finance Division keeps a general oversight and suggests corrective measures if the aggregate rate of expenditure appears to be going astray. Different procedures of financial control, conferring different powers and obligations on the branches involved, have been devised to fit each type of work, but all these depend for their efficient operation on mutual confidence and close co-operation between the professional and administrative divisions.

The Method of Control. The procedure for controlling expenditure on new works is embodied in the arrangements for meeting requirements for new buildings, described on pages 139–142. The administrative section has to approve the scheme in principle at the sketch plan stage, obtaining the approval of the Treasury if necessary and the agreement of the principal Department if the cost of the scheme is to be recovered. The administrative section is again consulted when tenders are received. At that stage the architect submits a report giving details of the expenditure to which he wishes to commit the Ministry, and explaining any differences between the tender figures and those of earlier estimates. If the proposal is considered satisfactory, possibly after further application to the Treasury, the Director of Contracts is authorised to accept the recommended tender. After this stage no important change may be made in the nature or scope

of the scheme without the approval of the administrative division, which, in the case of proposed changes increasing the cost of the work, may again have to seek further approval from the Treasury. In the course of the work the architect may have to get authority from the administrative division for such matters as letting further contracts or sub-contracts, departures from the original scheme or from agreed standards, individual modifications likely to cost more than certain sums within the discretion of the architect, the use of overtime and week-end working if they are likely to add to the cost of the job, or claims for extra payment received from the contractor.

These procedures are designed to control the cost of work costing over £2,000, which can be adequately planned in advance and carried out by a contractor chosen by competitive tendering. Minor works, costing less than £2,000, where no abnormal features arise, are within the delegated powers of the Director General of Works, and are authorised and controlled by appropriate senior members within the Directorate. Where works carried out by a regional office cost between £2,000 and £10,000 authority is given by the Regional Director; above £10,000 they are subject to financial control from Headquarters.

This system does not apply where, for reasons arising from the extreme urgency or the nature of the work, schemes have to be started before detailed drawings or bills of quantities have been prepared or when they have been prepared for a part of the work only. Some research buildings are required in a hurry and they must incorporate the latest techniques. In such exceptional cases a firm estimate of total cost cannot be given and if the administrative division agrees that departure from orthodox methods is justified, special methods of contract procedure are adopted. An early start without proper planning may lead to financial complications later, although a special system of control is applied, based on estimates of cost submitted at regular intervals as the scheme develops.

Expenditure on maintenance work is controlled on broadly similar lines to new works, but there are special procedures for supplies and lands services.

CONTRACTS

Government contracting policy and practice are now settled by a joint organisation of the contracting and supply Departments of the Government. This organisation was originally set up in 1920 to promote uniformity of policy and functions, to eliminate inter-departmental competition, and to secure economy by co-ordination of purchases. The two principal forms of contract used by all Government Departments contain standard conditions arising from the Government's special position, e.g., that the contractor should

observe the Fair Wages Resolutions of Parliament, that he should not make corrupt gifts to State employees, and that no Member of Parliament may have any share in the contract. The Government also carries its own fire risks in respect of the works under construction. Apart from the special Government clauses, the Ministry's form of contract differs essentially from those used in private practice because the Ministry fulfils the functions of both the client and the architect.

As explained elsewhere, the administrative divisions are responsible for the decision to undertake works or to acquire stores, while the professional and technical divisions are responsible for the design and quality of the work or the stores contracted for, and the supervision of the contract. It is the function of the Director of Contracts to ensure that the Ministry's contractual commitments are made with strict economy, that satisfactory contracts procedure is observed and that contracts are legally sound. He is not concerned with the purchase and hire of land and buildings.

While the Director of Contracts is ultimately responsible to the Accounting Officer for the correctness of contract procedure, the executive work of inviting tenders and placing contracts is to some extent carried out by other Divisions of the Ministry. For example, the Supplies Division invite their own tenders and accept straightforward cases up to £2,500, whilst larger or unusual cases have to be referred to the Contracts Directorate for approval before acceptance. On the other hand, all contractual procedure for Headquarters works services is the concern of the Directorate. Regional Directors, who act in this matter as the representative of the Director of Contracts and have contracts staff under their control, are able to place contracts up to the full limit (£10,000) of their power to undertake works, subject to acceptance of the lowest competitive tender and to the absence of abnormalities of any sort. In general, the system allows technical divisions a certain amount of initiative, and avoids undue centralisation and consequent delay.

The aim of Government contracting must be, first, to make the best bargain possible consistent with securing satisfactory performance of the contract and with paying a fair and reasonable price for goods and services, and second, to ensure that justice is done and seen to be done to all firms seeking a share in Government work. These ends are normally secured by competitive tendering and this is adopted wherever possible. Invitations to tender are not issued by public advertisement; experience has shown that this procedure may result in tenders from firms of unknown capacity and suitability whose tenders might not be acceptable even if they were the lowest. Lists of reputable firms throughout the country are maintained for the Ministry's various requirements, and tenders are invited only from

firms on these lists; so far as possible all firms on the lists are given opportunities to tender for work within their capacity. The Ministry is always ready to consider applications for inclusion on these lists.

For building works, the Ministry aims to contract wherever possible at 'fixed' prices, based on bills of quantities for the larger jobs. The 'fixed' prices have, however, in post-war conditions been variable in respect of changes in wage rates or prices of materials during the duration of the contract. Where full drawings and specifications are not available the bills of quantities may be 'approximate'. In special cases it may be necessary to use schedules of rates for various operations: in that case the work done is measured afterwards to ascertain the sum due. Contracts involving reimbursement of actual cost of materials and labour used by the contractor, plus a fee which is preferably fixed in relation to the estimated cost of the job rather than as a percentage of cost, are only made when other methods are impracticable; but a large volume of day-to-day maintenance work must be done on this basis, as must certain research and development projects where the full requirements are not known when work begins. In such contracts close supervision is desirable and great care has to be taken in the choice of the contractor.

Whatever the type of contract, contractors are normally responsible for providing their own materials; during the war and for some time after, the Ministry was forced to supply a large range of materials to contractors for jobs of high priority in order to overcome shortages, but the process has largely been discontinued because of added complications and because it derogated from the contractor's proper responsibilities and could give rise to claims for delay.

Much of the work on a large building contract is now carried out by specialist firms, e.g., the electrical and the heating and ventilation installations, asphaltting, and flooring. These firms are normally selected by the Contracts Directorate by means of competitive tendering and the general contractor is then instructed to place sub-contracts with them. He thus retains the responsibility for controlling and co-ordinating the whole of the work on the site.

The Ministry normally bases its contracts for the purchase of supplies on a price per article, or per unit for a given quantity; alternatives for varying quantities may also be called for, and tenderers are sometimes asked to quote for delivery of such quantities as may be ordered in a given period up to a stated maximum. Prices normally include delivery where the destination is known.

The Contracts Directorate is also concerned with licences in the Royal Parks for catering and amusements, with agreements for electricity, gas and water supplies to Government property and with patent and royalty questions arising in connection with contracts.

It controls the contractual arrangements for the disposal of surplus goods (though not of land and buildings) by the Supplies Division.

A large and important part of the Directorate's functions is the settlement, short of arbitration, of the many questions of interpretation and other disputes which arise in the course of contracts and may involve claims of right or of equity, or *ex gratia* payments. The Treasury Solicitor's Office is consulted when legal advice is needed.

REQUIREMENTS FOR NEW BUILDINGS

When the need for a new building arises, it is the responsibility of the administrative division to examine the merits of the proposal, to agree the size of the building necessary, and to obtain approval in principle from the Treasury. Where the Ministry is acting as agent for another Department on a recoverable basis, the proposals have usually already been agreed in principle with the Treasury before the request for building is made to the Ministry of Works; in that case they can be accepted by the administrative division and conveyed to the professional staff for examination.

The first problem is to obtain a site, and this is sometimes difficult, especially if exacting conditions are attached to its selection. Town planning requirements must, of course, be observed and good agricultural land must be avoided as far as possible. This stage of a scheme can often involve protracted negotiation. In the case of the larger research schemes and other similar works the land may be found by the Department concerned, but otherwise sites are normally found by the Directorate of Lands and Accommodation in conjunction with the Directorate of Works. The decision as to suitability can only be reached after consideration has been given to the size of the site, the subsoil, the main drainage capacity, main water, gas and electricity supplies, means of access, accommodation for building and operational workers on large, isolated projects, and any other difficulties or advantages which may exist. Normally the Directorate of Lands and Accommodation, in discussion with the proposed occupier and in accordance with approved standards, prepares schemes of accommodation showing the space to be provided to meet the requirements.

There are occasions when the Minister, on the advice of the Director General of Works, appoints an eminent private architect to design and supervise the erection of an important building—as in the rebuilding of the House of Commons. The Ministry takes the view that it is in the public interest to engage outside architects for some of the larger and more important schemes. At the same time it is equally important that the professional staff of the Ministry should be given full scope for exercising and developing their own skill in

important and architecturally interesting projects; without such opportunities it would be difficult to attract and retain officers of the right calibre, and the Ministry is jealous of its reputation for good building.

After agreement has been reached on the site and on schedules of accommodation, the Directorate of Works is responsible for preparing and obtaining agreement to sketch plans and reporting, with the plans, the estimated cost, covering building, engineering and supplies services, together with site conditions and any other features which may have a bearing on planning, progress and cost. As a general principle the architect is responsible for designing and providing the buildings and all the accommodation required, and the engineer is responsible for providing the mechanical, electrical and special equipment. The architect also acts as co-ordinator. For the more complicated projects, especially for large scale research buildings, a design liaison team may be set up, comprising officers of the Directorate of Works and technical experts of the Department concerned (e.g., Ministry of Supply), for the translation of the requirements into practical building and engineering terms. The Ministry of Works has an advantage in that within its organisation not only are architects, quantity surveyors and all branches of engineering closely associated, but in addition there is a specialist staff in the Controller of Supplies' Division which can design and supervise the manufacture of equipment.

As explained in the earlier section of this chapter on financial control, the administrative section which is responsible for the particular service examines the scheme at the sketch plan stage and satisfies itself that the proposals are acceptable and that standards laid down for normal buildings, such as offices and canteens, are not exceeded. If the estimated cost is above a certain figure the administrative section seeks the approval of the Treasury. If the cost of the scheme is to be recovered from another Department for which the Ministry is acting as agent, the plans and estimate are formally submitted to the principal Department for approval. Where buildings are to be erected on important sites it is the Ministry's practice to consult the Royal Fine Art Commission before the plans are finally approved.

When authority has been received from the Treasury or principal Department, the architect is instructed by the administrative section to proceed with the preparation of working drawings and specifications and when these are complete they are referred to the quantity surveyor for the preparation of bills of quantities. Tenders are then invited by the Contracts Directorate from a list of contractors approved by the architect or engineer, and after scrutiny of the tenders

by the quantity surveyor the architect submits a full report and estimated cost, based on tender, to administration and recommends the acceptance of a tender. Administration authorises acceptance when satisfied that the scheme as worked out is economical and that there is full financial cover. The stages involved between the settlement of the outline or sketch plans and the letting of a contract are numerous, and are often involved and lengthy. During this period, although progress may seem least apparent, valuable work is done by the architect and engineer which can contribute greatly to the success of an undertaking by making it possible to present to the building and engineering contractors instructions as complete as possible for the work they have to carry out.

Supervision of the constructional work and of the provision of the services and equipment is undertaken by the architect and engineer through their site representatives, and during construction periodic reports are made on progress and expenditure. A programme and a time and progress chart are prepared, showing all the operations which go to make the finished job, and periodical conferences take place between all concerned in order to adjust any parts of the work which depart from the programme.

For most new works schemes, the architect's or engineer's site representative is the clerk of works. The title is an old one—it was established as early as the reign of Edward III—but naturally the duties have changed with developments in the building industry. The clerk of works is responsible for site supervision, that is for seeing that the professional officer's design, as shown in the plans, specifications and other contract documents, is interpreted correctly and that his instructions are carried out so that the work is accomplished within the time required. The clerk of works therefore plays a most important part in building construction, for he is in constant and direct contact with the contractor and it is his influence which can immediately affect the course of a project. He reports to the professional officer weekly on the progress of the work, giving such information as the percentage of work completed, the amount of money spent, the number of men on site, any shortages in labour or materials, and any other circumstance of which the professional officer should be aware. The range of knowledge demanded of a clerk of works has considerably widened during recent years with the development of new materials and techniques and, in addition to his technical knowledge, he must have the facility of exercising general control whilst maintaining good relations with the contractors and other site associates.

It is important that once a contract is let there shall be no changes of thought requiring alteration in the information handed to the

contractor; such alterations cause delay while the details and drawings are adjusted, and they disrupt the contractor's organisation and result in claims for compensation for losses entailed. No substantial variation can be authorised without the authority of administration, who have to satisfy themselves that the variation is really necessary. The principal Department or the Treasury is consulted if at any time the original estimate of cost appears likely to be exceeded.

On completion of the scheme a final report is made by the architect to administration, who in turn report final costs to the Treasury, or to the principal Department on whose behalf the work has been done. That is not the end of the story, for the quantity surveyors, the staff of the Contracts Directorate, and the Accounts Division may be kept busy long after the building has been occupied to the satisfaction of the Department concerned.

Only a few Departments have a works organisation and contracts directorate responsible for the execution of Government building work; the only works organisations which are at all comparable with that of the Ministry of Works are those of the three Service Departments. Their organisations differ in detail from that of the Ministry, but each Service Department has an organisation capable of dealing with the bulk of its own building work. Each Department carries out specialised work for which it is by experience and by the qualifications of its staff specially well equipped. There are arrangements whereby one works organisation may call upon another to help in carrying out work which is not highly specialised. The Ministry of Works participates in these arrangements, and in the four years from 1951 to 1955 new work costing over £6,500,000 was undertaken by the Ministry for the Service Departments. Information based on experience is freely exchanged between the works organisations of the Government Service and from time to time special studies are made of particular problems. An illustration of the value of this pooling of experience is the report, published in 1952, on *Economy of Building Materials*. The report was the result of a joint examination by the works organisations of the Service Departments and the Ministry of Works, meeting under the chairmanship of the Director General of Works of the Ministry.

THE MAINTENANCE OF BUILDINGS

The maintenance organisation of the Ministry has been mentioned in the chapters dealing with different classes of buildings, but more deserves to be said about the way in which the work is organised. The service is concerned with building and engineering maintenance of over 16,000 buildings in this country, and with work such as stoking boilers and driving lifts. The annual cost of its maintenance

services is about £14,000,000 and about 22,000 men of the building and engineering trades are employed, of whom 12,000 are direct employees of the Department. In addition, minor jobs costing altogether about £4,000,000 per annum are carried out by the organisation and 3,500 operatives are employed in altering, adapting and modernising buildings. About 3,000 professional and technical staff, supported by clerical, accounting and typing services, are engaged on this work in the Ministry.

An administrative section is responsible for broad questions of maintenance policy, for expenditure on maintenance affecting more than one Vote, and for general control of expenditure under the maintenance sub-head of the 'Public Buildings, United Kingdom' Vote. Other administrative sections are responsible for control of maintenance expenditure charged to other Votes. Standard frequencies of decoration and cleaning of buildings are also prescribed by administration.

The maintenance organisation is managerially controlled by the Director of Maintenance Services and contains two main branches, under a Chief Maintenance Surveyor and Chief Maintenance Engineer. General policy on standards of design and construction is controlled by the Chief Architect and the Chief Engineer, who also provide specialist service and advice on structural and sanitary problems. Although, therefore, maintenance services operate as an independent executive unit, their activities are closely integrated at all levels with those of all the other divisions controlled by the Director General of Works.

Control is maintained through a superintending surveyor and superintending engineer in the London and South Eastern area, through an assistant regional director with a regional engineer in each of the eight Regions and in Wales, and through the Director of Works and Services in Scotland. The executive unit in each case is the district, controlled by a district surveyor and district engineer working in parallel. There are two to four districts in the Regions and in Wales, three districts in Scotland, and fifteen (plus two special sections dealing with major alteration works) in London. A district is divided into two or three areas, each controlled by a superintendent of works and supervising engineer again working in parallel. Under them are foremen who are responsible for day-to-day maintenance, the operation of plant and services, and the supervision of larger works initiated by the district office.

Each year the requirements of each building are reviewed, estimates are prepared for each district and for each Region, and a national total is then calculated. More often than not the total has to be cut down. By a reverse process the total sum made available in

the Votes for maintenance is divided between the Regions, Wales, Scotland and London and is further subdivided between districts.

Operational services and minor maintenance work are done either by direct labour in the larger centres or by maintenance contracts or jobbing arrangements in the smaller provincial towns and country areas. Redecoration and structural repairs and renewals are invariably let by competitive tender. District officers have authority to proceed with work costing up to £2,000; any work estimated to cost more requires administrative authority before it can begin. Expenditure is recorded against each building and there is a complete system of records of costs including work done by direct labour, so that the cost of maintenance of a particular building can be taken into account when considering its future use. Adaptations, alterations and extensions to buildings are the subject of a separate annual budget and programme.

The object of the Maintenance Branch is, by efficiency in small things, to prevent deterioration and thus avoid the need for large scale repairs. To this end, routine inspection and servicing are planned, particularly in relation to engineering and building components which are subject to wear and tear.

It is an important feature of the Ministry's maintenance policy and organisation that the executive control and direction are in the hands of professionally qualified officers who have experience both of maintenance work and of alterations and adaptations to buildings. This gives them a wide knowledge of constructional problems.

DIRECTLY EMPLOYED INDUSTRIAL STAFF

Workmen have been directly employed on Crown buildings and in the Royal Parks for many centuries, but direct employment of industrial staff in the modern sense is of comparatively recent origin. By the end of the 1914-18 war the number of industrial staff was 1,500, distributed between four main services, viz., building maintenance, engineering maintenance, supplies and Royal Parks. The bulk of the maintenance work, both building and engineering, was carried out by contractors, but in 1920 the important step was taken of transferring to direct labour all general engineering maintenance work in London. Similar steps were taken at Windsor Castle, and at some other special buildings in the Ministry's care.

In 1931 it was decided to employ direct labour on general building maintenance in London and Edinburgh and this practice was gradually extended to the larger provincial cities, until by September, 1939, over 6,000 industrial staff were directly employed. During the 1939-45 war there were special reasons for using direct labour, especially when it became very difficult to arrange contracts; building labour

was rapidly diminishing and most contractors were engaged on large scale defence contracts. Also many of the buildings for which the Ministry was responsible, such as camps and hostels, were in isolated localities, where there were few local contractors to take on the work. The number of directly employed staff continued to rise during and after the war, reaching 33,000 by 1949. This number included 9,000 men in the Mobile Labour Force, a body recruited initially for war damage repair work, but which later carried out a large amount of new construction, notably at the atomic energy and other research establishments; this Force was gradually run down and was finally wound up in 1952. With the gradual return to normal conditions and the surrender of requisitioned premises the strength of the direct labour force has declined until in June, 1955, it stood at about 16,000.

There is some seasonal fluctuation in the numbers employed, as additional men have to be engaged in winter as stokers for heating Government buildings in London and the provinces. The Ministry also employs liftmen in all Government offices, except in a few cases where the lessors of a leased building operate the lifts as part of the lessors' services. More than 80 per cent of the lift attendants are disabled men. There are considerable advantages in treating this as a unified central service instead of leaving each Department to employ a few industrial staff.

Out of the total of 16,000 industrial staff, nearly 11,000 are employed by the Directorate of Works—about 5,000 in London and 6,000 in the provinces. The next largest group consists of 1,600 men employed by the Supplies Division, of whom nearly 1,000 are in London. Then there are nearly 900 watchmen, over 800 men employed in the Royal Parks and Gardens, 700 staff employed on transport services and about 700 custodians of ancient monuments.

The reduction in the size of the direct labour force since 1949 has taken place mainly in the numbers employed by the Directorate of Works. The change reflects changes in circumstances rather than policy. In choosing between contract and direct labour the Ministry uses whichever method is cheaper or more efficient. Direct labour is economical only where there is a regular volume of work sufficient to keep a balanced and substantial labour force continuously employed. In present circumstances, therefore, the use of direct labour is confined mainly to maintenance work in areas where there is a concentration of Government buildings, and for engineering services including stoking boilers and operating lifts, lighting and sewerage plants. Direct control and supervision enable prompt attention to be given to urgent work and, by withdrawing labour temporarily from less urgent jobs if necessary, such work can be carried out with the minimum of disturbance, to suit the convenience of occupying

Departments. These advantages are, however, quickly lost if the labour force is regarded as a static body for which work must be found; for this reason it is necessary to keep costs constantly under review, and to consider whether the work could be done more cheaply and equally efficiently by a contractor holding a period contract and doing other business besides the Ministry's to meet his overhead costs. Small jobs which are not strictly maintenance may be done by the maintenance organisation within strict financial limits, but the usual course is to let all work other than maintenance to contractors. The Ministry now possesses some 250 direct labour depots, most of which are part of the engineering maintenance service. The total annual cost of maintenance of public buildings in this country is about £14,000,000 and nearly half is carried out by direct labour.

In addition to those employed on maintenance and minor repairs and on running services, a number of masons, building workers and labourers are engaged on the upkeep of ancient monuments and historic buildings, many in remote and isolated positions. A few highly skilled stone carvers are employed on repair of stonework and on general maintenance at the Houses of Parliament, Hampton Court and other such buildings. Workers in the furniture trades are employed at the repair workshops of the Supplies Division and porters, packers and selectors handle and despatch goods at the stores. Gardeners of all grades, from skilled propagators to unskilled garden labourers, are employed in the Parks, where there are also a few posts which are unusual in the Civil Service, such as a gamekeeper and a deer dresser in Richmond Park. Motor mechanics are employed on the servicing and repair of the Ministry's vehicles, and there are men and women drivers for the Government Car Service. Watchmen, mostly ex-servicemen, are employed on the custody of Government occupied premises in London outside normal working hours.

The position of industrial staff in the Ministry's employment differs in some respects from that of workers employed in outside industry. Some grades are paid at rates corresponding with those prevailing in the industry concerned, but the rates of pay for others are negotiated with the appropriate trades unions either direct or through joint central councils and committees on which all employing Government Departments and the appropriate trades unions are represented. Questions which affect the conditions, welfare and efficiency of the Ministry's industrial staff are discussed on a Departmental Joint Industrial Council which follows the normal pattern of such councils. The Director of Establishments is the Chairman of the Council and disagreements that cannot be resolved are very rare. In individual depots there are shop committees on which elected shop stewards represent the members in meetings with the local supervisory staff of

the Ministry; in London there are also central committees where problems of wider interest are considered.

It is the policy of those responsible for industrial staff to keep their representatives fully informed of the Department's programme of work, and there is full consultation before changes in organisation are made which may affect the interests of the industrial staff. Tribute must be paid to the trades union officials who represent the various classes and grades of industrial workers on the Joint Industrial Council. While serving the interests of those they represent they have co-operated in many ways with the officers of the Department on the management side, particularly in dealing with the difficult problem of adjusting the organisation to meet changing conditions.

BUILDINGS OVERSEAS

Buildings overseas are the exclusive concern at Headquarters of about 50 architectural staff under a superintending architect, 30 members of the Supplies Division, a small section of the Lands and Accommodation Directorate, and an administrative section requiring the whole-time services of a Principal. Other services are called on as required.

The administrative section decides questions of policy, controls expenditure and is responsible to the Treasury for framing the estimates and to the Departments mainly concerned—the Foreign Office, Commonwealth Relations Office, and Board of Trade—for the fulfilment of the agreed programmes. Matters of policy and, in general, new requirements reach the section through the headquarters of these Departments. Minor questions, especially those affecting maintenance of buildings and furniture, are dealt with direct between the Ministry's Headquarters staff, the Ministry's overseas staff, and the posts themselves. The many problems involved and the comprehensive nature of overseas requirements result in an even closer co-operation between the Ministry and the three Departments than is usual in the case of Departments whose requirements lie in this country. The Ministry looks to the Departments with overseas services for special guidance on the scale of building required, the status of the post, the weight to be given to representational requirements, and for information on local conditions. This information, together with the more technical considerations arising from climate, site conditions and local building methods, labour and materials, determine the type and cost of the buildings. Within the general framework of the agreed standards, each building is an individual problem. The usual relations between the Ministry and the Treasury apply to this service, but the Ministry's proposals are placed before the Treasury at a very early stage in the planning of a

new building so as to secure agreement from the start on the standards to be adopted.

The functions of the professional and technical divisions, whose work is co-ordinated and progressed by the superintending architect, are the same as in accommodation work in this country. The Ministry maintains its own staff in Cyprus, Delhi and Singapore. These offices are in charge of an architect and are responsible for the day-to-day administration of the properties in their area. Important new works are normally directed from London with some local assistance. Over half the staff of these overseas offices are locally engaged. The Ministry has its own representatives at about fifteen posts where an exceptionally large amount of property is held, e.g., at Washington and Tokyo. At about twenty other posts, mainly in Europe and in Central and South America, the Ministry has appointed qualified local architects who are paid by fee to advise on maintenance and to superintend work. They may not put in hand more than minor repairs without reference to the Ministry. At other posts, where none of these arrangements apply, local firms carry out normal maintenance repair work after consultation with the Ministry. The Headquarters staff engaged on this service regularly visit posts in the areas for which they are responsible. To plan a new building in a foreign capital the architect must familiarise himself with local conditions, including the local style of architecture and building methods. He is responsible, in consultation with the head of the mission, for finding a site and for detailed discussion of requirements, whether for a house or for offices, to supplement the broad agreement reached in London between the Department concerned and the Ministry. Day-to-day supervision of the progress of work is normally in the charge of one of the Ministry's clerks of works, though on occasion a local architect is employed. In either case the Headquarters architect regularly visits the post to satisfy himself with progress and standards of construction. Engineers and supplies officers may also have to supervise the services for which they are responsible.

Regular tours of inspection of buildings in the charge of the Ministry are undertaken by architects and supplies officers, in the areas not covered by an overseas office; they have to see that the Ministry's property is being properly cared for and to assess the need for repairs or improvements. In addition the Ministry frequently has to send experts to posts overseas to investigate particular problems, such as the purchase of a house or difficulties over lease negotiations, or furnishing requirements. Matters of this kind are daily being settled by the posts themselves in consultation with the Ministry's overseas offices or local representatives, but every year there are many which require direct investigation by the Ministry's

Headquarters staff. These visits serve a wider purpose than the solution of an immediate difficulty because it is only by first-hand knowledge of conditions overseas that the Ministry can gain the experience required to run the service successfully and to settle by correspondence the great majority of the lesser problems which arise.

Special Problems. Mention has been made of some of the special problems of overseas buildings from the point of view of the requirements of the post. There are also special circumstances in connection with contracts. The normal contract procedure of competitive tendering is sometimes impracticable owing to the rudimentary state of the local building industry or to its lack of experience of the type of building required. It may be necessary on rare occasions to have recourse to prime cost contracts with the resulting need for close supervision. Where such conditions prevail or tenders are unreasonably high the Ministry may act as its own contractor and engage direct labour locally. In recent years this has been done at Ahwaz in Persia, at Colombo and in the Persian Gulf.

Legal complications also arise and agreements have to be examined by the legal adviser to the post as well as by the Ministry's own staff and, on points of English law, by the Treasury Solicitor. Negotiations, except where unusually complex, are carried out by the post on behalf of the Ministry. Diplomatic, though not consular, representatives enjoy immunity from local building regulations, but it is customary to comply with them. In some countries the status of consular property is governed by special conventions, some of which embody unfavourable terms, and it is necessary to ensure before building that the risk of confiscation or loss is not excessive. Different taxation arrangements exist in various countries and reciprocal agreements relating to taxes on diplomatic buildings are often in force; all these factors must be considered.

But the main difficulty of this service is the financial control of expenditure, as might be expected in an estate scattered throughout the world. In general the only payments made in this country are for materials, plant, furniture and supplies purchased here. The bulk of the expenditure is incurred overseas in local currency, paid for by the posts overseas and brought to account in London. There is an unavoidable lapse of time between the date on which payment is made and the date on which payment is brought to account, and this makes it impossible to assess with precision liabilities and the rate of expenditure in the current financial year. This in turn increases the difficulty of framing reliable estimates for the following year. The key to control lies in maintaining accurate records of commitments accepted or authorised, and in close co-operation between the posts overseas

and the Ministry's overseas offices and Headquarters organisation. Even the maintenance of the commitment records is no easy matter with so many posts and with programmes of work which, in the nature of the case, are so liable to alteration.

It is not administratively possible to centralise in London the payment of accounts which are expressed in most of the languages and currencies of the world. Ministry of Works sub-accounts are operated by the heads of posts at approximately 250 places. Payments are made by the head of post on certification by clerks of works, local architects or, in their absence, on his own certification. Most accounts are now made up monthly and sent to the Ministry's Accounts Division in London with supporting documents and translations, through the Ministry of Works overseas offices where these exist. This whole process normally takes some months to complete. The result is that in January, when final decisions have to be made as to the possible need for a supplementary vote in the current financial year and as to the size of next year's estimates, the expenditure returns available normally cover only the first six months of the financial year. Recorded expenditure must, therefore, be supplemented by frequent comparisons of authorised commitments against estimates—a tricky process in which allowance must be made for local conditions such as building costs, customs of payment, monsoons and other seasonal weather conditions, and for other factors such as currency variations, transport difficulties and legal delays. Although much has been done to overcome these difficulties by close progressing of work under the Ministry's direct supervision, and by the institution of firm but flexible methods of control over expenditure incurred by posts, nothing can entirely eliminate the element of uncertainty.

MANAGING THE MINISTRY'S PROPERTIES

The Ministry provides and holds in its own name most of the office accommodation and a large part of the storage accommodation used by Government Departments. Post Office premises are held in the name of the Postmaster General, but are managed and maintained by the Ministry of Works. Outside the Ministry's estate the Department also exercises certain functions of management in respect of various classes of property to which it does not hold title, such as ancient monuments. Royal Parks and Palaces are held by Her Majesty in right of the Crown. Certain other Government Departments are also empowered to acquire and hold property to meet their operational, as distinct from their administrative, requirements, notably the Service Departments, the Ministry of Supply, the Ministry of Agriculture, Fisheries and Food, and the Ministry of Transport and Civil Aviation.

There is a clear distinction between the work of the Ministry in estate management and that of the Office of the Commissioners of Crown Lands. As mentioned in Chapter II, the Office of Works and the Office of Woods and Forests (the former title of Crown Lands) were amalgamated for a short period from 1832 to 1851, but the arrangement was not satisfactory, largely because of the differences in function and the need for keeping the land revenues of the Crown free from charges due to public works. These differences persist today and they were recognised and confirmed by the Committee which examined the organisation for the administration of Crown Lands in 1955*. The duties of those responsible for the administration of the Crown Estate are to protect and improve capital assets and to secure an adequate return on landed property in town or country. Such duties are very different from those of a Ministry which owns property as a necessary but incidental step in providing accommodation or other services to meet Government needs. Financial considerations are of great importance to the Ministry, but whereas the Commissioners of Crown Lands hold most of their properties as an investment, the Ministry's financial interest is to provide its services as economically as possible. Although the Ministry may sometimes have to let or sublet accommodation which is temporarily surplus to requirements, it is not the Ministry's function to acquire properties or to manage them with a view to subsidising departmental expenditure or to secure a return for the Exchequer. There is, of course, close co-operation between the two offices. Indeed it frequently happens that property which is part of the Crown Estate can best be used for Government purposes and the Office of Crown Lands and the Ministry are in many cases in the relationship of landlord and tenant, e.g., Dover House, which is the property of Crown Lands, is maintained by the Ministry of Works and occupied by staff of the Scottish Office.

The Ministry's total estate in 1955 consisted of about 15,000 holdings in this country representing over 122,000,000 square feet of space of which 37,000,000 are in London and 85,000,000 in the provinces. About 42,000,000 square feet of the total accommodation consisted of offices or premises of similar types; 39,000,000 square feet of industrial premises such as storage buildings, workshops, factories and garages, and the remaining 41,000,000 square feet of miscellaneous buildings of all sorts, from vast research establishments to individual houses. In addition, excluding sites for prospective new buildings or extensions and small pieces of land used as allotments, the Ministry holds 13,000 acres of land divided into some 300 holdings, which are retained for reasons either of security or amenity;

* *Report of the Committee on Crown Lands, 1955 (Cmd. 9483).*

about 8,500 acres of this land is let by tenancy or licence for grazing, and 4,500 acres for general agricultural purposes. The Ministry pays out approximately £6,000,000 a year for its leasehold property, which forms about two fifths of its total holding.

The work involved in keeping this vast estate at the size appropriate to the ever changing needs of Government Departments can be seen in the fact that about 5,000 transactions, consisting of purchases, leases, sales, lettings, renewals and surrenders of tenancies and settlements of compensation, are completed annually. Many general questions arise in the course of these operations and a small administrative section is charged with the general oversight of the Department's policy in these matters in close co-operation with the Directorate of Lands and Accommodation.

The General Lands Administrative Section. The administrative section is concerned with general questions in the sphere of land transactions and the management of the Ministry's estate. Legal considerations play a considerable part since the Ministry must have regard not only to the general law relating to land, even where it is not expressly binding on the Crown, but also to the particular statutes which govern its own operations. These statutes include the Commissioners of Works Act, 1852, by which the Commissioners were enabled to buy, take or accept land necessary for the public service, and to sell or lease any land so taken. The Ministry also has certain powers for the compulsory acquisition of land, including those derived from the Town and Country Planning Acts of 1947 and the Requisitioned Land and War Works Act, 1945. There are also emergency powers derived from Defence Regulations which are now little used by the Ministry, except in so far as they are required for retention of property requisitioned during the 1939-45 war and the early post-war years. Recent legislation relating to land which is of considerable importance to the Ministry's activities is the Landlord and Tenant Act, 1954, which confers increased security on tenants of business premises, including Government premises such as offices. But there are many other enactments such as the Public Health Acts, the Rent Restriction Acts and the Town and Country Planning Acts to which the Ministry must have regard in managing its estate.

The administrative section issues instructions within the Ministry both to other administrative divisions and to the executive divisions, as to the policy and procedure for operating the special land powers of the Ministry and conforming to the general law relating to land. The policy as regards the use of these powers is closely linked with the question of the price to be paid for the purchase of land, and on these matters the section works in close consultation with the Treasury.

A good test of the efficient management of the Ministry's estate is the amount of space which is held vacant at any given time. It is obviously desirable that this should be kept to a minimum, and a close watch is kept on vacant accommodation to ensure that decisions for its re-use are taken, and any necessary work of adaptation carried out, as quickly as possible. This involves close co-ordination between the administrative divisions, the Directorate of Lands and Accommodation and the Directorate of Works.

One of the most important questions in recent years has been the release of land held on requisition, so as to bring to an end as quickly as possible the Ministry's reliance on emergency powers.

The professional officers have authority to settle claims for compensation for requisitioned land, within certain limits. Beyond those limits cases are referred to the administrative section, which may have to go to the Treasury for approval. Also it is the administrative section which acts as the focal point for instructing the Treasury Solicitor on leases and conveyances and for seeking his advice on all lands questions on which legal advice is required. The section also has to see that account is taken of the Ministry's interests in the development plans submitted by local planning authorities to the Ministry of Housing and Local Government.

The Ministry of Works is the Government's general disposal agent for land, subject to certain exceptions such as agricultural land held by the Ministry of Agriculture, Fisheries and Food, the peace-time acquisitions of the Service Departments, and industrial and storage buildings, for which the Board of Trade is responsible.

All these activities entail a considerable amount of co-ordination of the Ministry's land transactions and property management whether they are the immediate concern of the administrative divisions or the Directorate of Lands and Accommodation. The Directorate have their own arrangements for co-ordinating and supervising activities in the Regions.

The Directorate of Lands and Accommodation. When new buildings are required for Government use, sites have to be found and acquired for them; when existing buildings are to be used, they have to be found and leased or purchased; when a tenancy nears its end, its renewal has to be negotiated; new uses for vacant accommodation have to be found and re-occupation organised; surplus land or premises must be sublet or sold. These are some of the everyday tasks which engage the attention of the professional and technical staff of the Directorate in London, Scotland, Wales, the Regions and a number of overseas territories. They participate in the management of an estate comprising properties of diverse types ranging from a

coastguard station site or a two-roomed office in a small country town, to the Houses of Parliament or a London headquarters building which may accommodate two or three thousand staff.

An additional responsibility which is undertaken by the Directorate is that of ensuring that the accommodation provided for Government staffs is allocated and used with economy combined with reasonable working conditions. This is achieved by agreeing the initial allocation of space with the occupying Department and by subsequent periodic inspections to ensure that no extravagance in the use of space goes unchecked. The Directorate collaborates with the other divisions of the Ministry in working out the most suitable and least expensive way of adapting and equipping premises to their new use and preparing an acceptable layout of the accommodation. Subsequent action within the Directorate concerns mainly the final settlement of terms for the property, the completion of the legal formalities in collaboration with the Treasury Solicitor, and co-ordination with other branches of the Ministry and of the incoming Department to ensure that the accommodation is occupied as soon as it is ready.

Apart from purchases and leases, sales and sublettings, a vast number of smaller transactions are handled by the various grades of estate surveyor forming the bulk of the Directorate. These include renewals and surrenders of tenancies, the negotiation of wayleaves and easements, the investigation of encroachments or the non-observance of covenants, the granting (or withdrawal) of licences for privileges in respect of Crown property, the agreement of charges for services such as central heating, derequisitioning settlements, the negotiation of claims for compensation for the taking of land for opencast coal working on behalf of the Ministry of Fuel and Power, and the solving of all the different problems which can arise between adjoining owners or where the relationships of landlord and tenant or vendor and purchaser exist.

Much of the work is of a routine character, but there are also unusual aspects of estate management in connection with Royal Palaces, castles and parks, historic buildings and ancient monuments, museums, art galleries and research and experimental establishments. There is also land agency work in the holding of land required for various purposes, whilst overseas there is the management of accommodation required for diplomatic, consular and trade mission use. The operations of the Directorate in the estate management field are certainly on a larger scale than those of any similar organisation in the United Kingdom and are probably unequalled in their variety.

CHAPTER XIV

Conclusion

*

AN account has now been given of the kind of activities in which the Ministry of Works is engaged, its organisation, some of its problems of management and its place in the machinery of government. In a typically British manner new duties have been grafted on to an old organisation which traces its origins far back into the past. The work now falls into three main groups which broadly reflect the historical development of the Ministry. First, there are certain traditional or cultural functions such as the care of the Royal Palaces, the Royal Parks and Gardens, work for ceremonial occasions, the preservation of historic buildings and ancient monuments and other responsibilities which in some countries are carried either by a Ministry of Education or a Ministry of Fine Arts. Secondly, the Ministry provides accommodation and all types of buildings and supplies for the civil needs of Government Departments in this country and abroad. Thirdly, it has general duties in connection with the building and civil engineering and building materials industries, similar to those exercised, for example, by the Board of Trade for various other industries.

Activities in the first group are much in the public eye, but they form a relatively small part of the Ministry's work in terms of staff and expenditure. The third group of duties was assumed during the 1939-45 war and for several years was the most important function of the Ministry in relation to the war effort and to post-war industrial and economic recovery. Now, ten years after the war, it is the second group of services which accounts for most of the staff and the largest expenditure.

Many of the buildings and supplies now required by other Departments are highly specialised, and the work done by the Ministry goes far beyond the former simple duties of providing residences, offices and furniture. It would, of course, be feasible for each Department to have its own building and supply organisation, but a centralised service has many advantages apart from its obvious economy. With a centralised service, office buildings and furniture can be freely interchanged among Departments and there is less risk of wastage

due to fluctuations in the size of the staff of individual Departments. Again, standards of accommodation and of working conditions can best be applied throughout the civil service when they are under the charge of one Ministry. As regards the design of new buildings, the more varied the building programme the greater the opportunity it offers to professional staff and this is an important factor in attracting and retaining staff of high calibre and keeping up the quality of the work done, especially in connection with buildings for research and development projects.

It is of interest that most countries now have a central building department, though the scope of the work done differs widely. In many cases the Public Works Department engages in the construction of harbour and river works, roads and bridges as well as public buildings, and in some cases there is one works organisation for both civil and defence purposes. Construction work may be done by these Public Works Departments which in this country would be the responsibility of local authorities or other public bodies, but no country has a works organisation with the same variety of interest. No doubt this is because the Ministry of Works has been developed to meet our own peculiar requirements without overmuch regard to theories about the organisation of government.

Some Government Departments would rightly claim that their decisions and the way in which they carry out their duties directly affect the lives of large sections of the population. No such claim could be made by the Ministry of Works. In the main, those whose interests are directly affected by its work are themselves servants of the Crown employed at home or abroad, in offices and in many other types of buildings. It is important that the buildings in which they work should be satisfactory and that the Government as an employer should not lag behind commerce and industry in taking advantage of modern techniques and improving conditions. The public benefit indirectly because staff do not give of their best if they are badly housed. Moreover where buildings are used by the public—mainly local offices throughout the country—the public as well as the staff benefit directly by having adequate and up-to-date facilities for transacting business and for interviewing or otherwise meeting the special needs of the particular service.

The Ministry's function is therefore essentially a practical one and there are few large administrative issues. The main problems are those of organisation within the Ministry, and one of the most important is the financial control of the large annual expenditure on building and supplies. This has several aspects. The Ministry has to co-operate with the Treasury in adjusting the programme of work year by year to the nation's current financial situation, and it has to

select from a host of competing demands those items which should be given priority. Then, in providing and maintaining accommodation, the Ministry has to keep a check on what Departments would like to have, by controlling the programme and the rate of expenditure so that during the financial year the amount spent does not exceed the amount voted by Parliament. The system of control is itself under continuous review in order to meet the necessarily high standards set by the Public Accounts Committee of the House of Commons.

It must be obvious from the scale and variety of the Ministry's duties that co-ordination of the activities of different divisions is the first essential to efficiency, and this co-ordination is needed at all levels. The Ministry employs a high proportion of professional and technical staff ranging over a number of different professions and grades. Even on a single building scheme the services are needed of administrative officer, estate surveyor, architect, engineer, quantity surveyor and supplies officer, and they must work together if delays are to be avoided and costs kept down. The expression 'team work' is used so often that it has lost some of its force, but it best describes the co-operation which is needed in all that the Ministry does. Moreover, in a large and complex organisation efficiency can only be achieved and maintained by a continuous and conscious effort of leadership and direction from senior officers. It is not sufficient merely to have good methods and clear instructions. As in many other spheres of activity, therefore, the greatest problem is the human one and the greatest need is to recruit and train those who are likely to be the leaders of the future.

Appendices

APPENDIX I

FIRST COMMISSIONERS OF WORKS AND PUBLIC BUILDINGS

Rt. Hon. Lord Seymour (afterwards Duke of Somerset).	1851-52
Lord John Manners (afterwards Duke of Rutland).	1852-53
Sir William Molesworth, Bart.	1853-55
Sir Benjamin Hall, Bart. (afterwards Lord Llanover).	1855-58
Lord John Manners (afterwards Duke of Rutland) (<i>see also</i> 1852).	1858-59
Rt. Hon. Henry Fitzroy.	1859
Rt. Hon. W. F. Cowper (afterwards Lord Mount-Temple).	1860-66
Lord John Manners (afterwards Duke of Rutland) (<i>see also</i> 1852 and 1858-59).	1866-68
Rt. Hon. A. H. Layard.	1868-69
Rt. Hon. A. S. Ayrton.	1869-73
Rt. Hon. W. P. Adam.	1873-74
Rt. Hon. Lord Henry Gordon-Lennox.	1874-76
Rt. Hon. G. J. Noel.	1876-80
Rt. Hon. W. P. Adam (<i>see also</i> 1873-74).	1880
Rt. Hon. G. J. Shaw-Lefevre (afterwards Lord Eversley).	1881-84
Rt. Hon. The Earl of Rosebery, K.G., K.T.	1885
Rt. Hon. D. R. Plunket, Q.C. (afterwards Lord Rathmore).	1885-86
Rt. Hon. The Earl of Morley.	1886
Rt. Hon. The Earl of Elgin and Kincardine.	1886
Rt. Hon. D. R. Plunket, Q.C. (afterwards Lord Rathmore) (<i>see also</i> 1885-86).	1886-92
Rt. Hon. G. J. Shaw-Lefevre (afterwards Lord Eversley) (<i>see also</i> 1881-84).	1892-94
Rt. Hon. Herbert Gladstone (afterwards Viscount Gladstone, G.C.B., G.C.M.G., G.B.E.).	1894-95
Rt. Hon. A. Akers-Douglas (afterwards Viscount Chilston).	1895-1902
Rt. Hon. Lord Windsor, C.B. (afterwards Earl of Plymouth, G.B.E.).	1902-05
Rt. Hon. Lewis Harcourt (afterwards Viscount Harcourt).	1905-10
Rt. Hon. The Earl Beauchamp, K.G., K.C.M.G.	1910-14
Rt. Hon. Lord Emmott, G.C.M.G.	1914-15
Rt. Hon. Lewis Harcourt (afterwards Viscount Harcourt) (<i>see also</i> 1905-10).	1915-16
Rt. Hon. Sir Alfred Mond, Bart. (afterwards Lord Melchett).	1916-21
Rt. Hon. The Earl of Crawford and Balcarres, K.T.	1921-22
Rt. Hon. Sir John Baird, Bart., C.M.G., D.S.O. (afterwards Viscount Stonehaven of Ury, G.C.M.G., D.S.O.).	1922-24
Rt. Hon. F. W. Jowett.	1924

APPENDIX I

Rt. Hon. Viscount Peel, G.B.E. (afterwards Earl Peel and Viscount Chanfield of Chanfield, G.C.S.I., G.B.E.).	1924-28
Rt. Hon. The Marquess of Londonderry, K.G., M.V.O.	1928-29
Rt. Hon. George Lansbury, J.P.	1929-31
Rt. Hon. The Marquess of Londonderry, K.G., M.V.O. (<i>see also</i> 1928-29).	1931
Rt. Hon. W. G. A. Ormsby-Gore (afterwards Lord Harlech, K.G., G.C.M.G., F.S.A.).	1931-36
Rt. Hon. The Earl of Stanhope, K.G., D.S.O., M.C.	1936-37
Rt. Hon. Sir Philip Sassoon, Bart., G.B.E., C.M.G.	1937-39
Rt. Hon. Herwald Ramsbotham, O.B.E., M.C. (afterwards Viscount Soulbury, G.C.M.G., G.C.V.O., O.B.E., M.C.).	1939-40
Rt. Hon. The Earl de la Warr.	1940
Rt. Hon. Lord Tryon of Durnford.	1940

MINISTERS OF WORKS AND BUILDINGS AND FIRST COMMISSIONERS OF WORKS

Rt. Hon. Lord Reith, G.C.V.O., G.B.E., C.B., LL.D.	1940-42
Rt. Hon. Lord Portal of Laverstoke, D.S.O., M.V.O. (afterwards Viscount Portal of Laverstoke, G.C.M.G., D.S.O., M.V.O.)	1942

MINISTER OF WORKS AND PLANNING

Rt. Hon. Lord Portal of Laverstoke, D.S.O., M.V.O. (afterwards Viscount Portal of Laverstoke, G.C.M.G., D.S.O., M.V.O.)	July, 1942 -February, 1943
--	-------------------------------

MINISTERS OF WORKS

Rt. Hon. Lord Portal of Laverstoke, D.S.O., M.V.O. (afterwards Viscount Portal of Laverstoke, G.C.M.G., D.S.O., M.V.O.)	1943-44
Rt. Hon. Duncan Sandys.	1944-45
Rt. Hon. George Tomlinson.	1945-47
Rt. Hon. Charles W. Key.	1947-50
Rt. Hon. R. R. Stokes, M.C.	1950-51
Rt. Hon. George Brown.	1951
Rt. Hon. Sir David Eccles, K.C.V.O.	1951-54
Rt. Hon. Nigel Birch, O.B.E.	1954-55
Rt. Hon. Patrick Buchan-Hepburn.	1955-

APPENDIX I

PARLIAMENTARY SECRETARIES MINISTRY OF WORKS

1940-56

George Hicks, C.B.E.	1940-45 (Works)
H. G. Strauss, Q.C. (afterwards Lord Conesford, Q.C.)	1942-43 (Planning)
Rt. Hon. Harold Wilson, O.B.E.	1945-47
E. F. M. Durbin.	1947-48
Rt. Hon. Lord Morrison of Tottenham.	1948-51
Hugh Molson.	1951-53
J. R. Bevens.	1953-

APPENDIX I

PERMANENT SECRETARIES OF THE OFFICE AND MINISTRY OF WORKS 1852-1956

Trenham W. Philipps.	1852-54
(T. W. Philipps had been Official Secretary to the Chief Commissioner of Woods and Forests in 1851 before be- coming Secretary of the Office of Works on its formation.)	
Alfred Austin, C.B.	1854-68
George Russell.	1868-74
Sir Algernon Bertram Freeman Mitford, G.C.V.O., K.C.B., J.P., D.L. (afterwards Baron Redesdale).	1874-86
H. W. Primrose, C.S.I., C.B.	1886-95
The Rt. Hon. Sir Reginald Baliol Brett, G.C.B., G.C.V.O., LL.D. (afterwards Viscount Esher).	1895-1902
The Hon. Sir Schomberg McDonnell, G.C.V.O., K.C.B.	1902-12
Sir Lionel Earle, G.C.V.O., K.C.B., C.M.G.	1912-33
Sir Patrick Duff, K.C.B., K.C.V.O.	1933-41
Sir Geoffrey Whiskard, K.C.B., K.C.M.G.	1941-43
Sir Percival Robinson, K.C.B.	1943-46
Sir Harold Emmerson, G.C.B., K.C.V.O.	1946-56
Sir Edward Muir, K.C.B.	1956-

Chart I—Organisation of Administrative Divisions at Headquarters

(As at January, 1956)

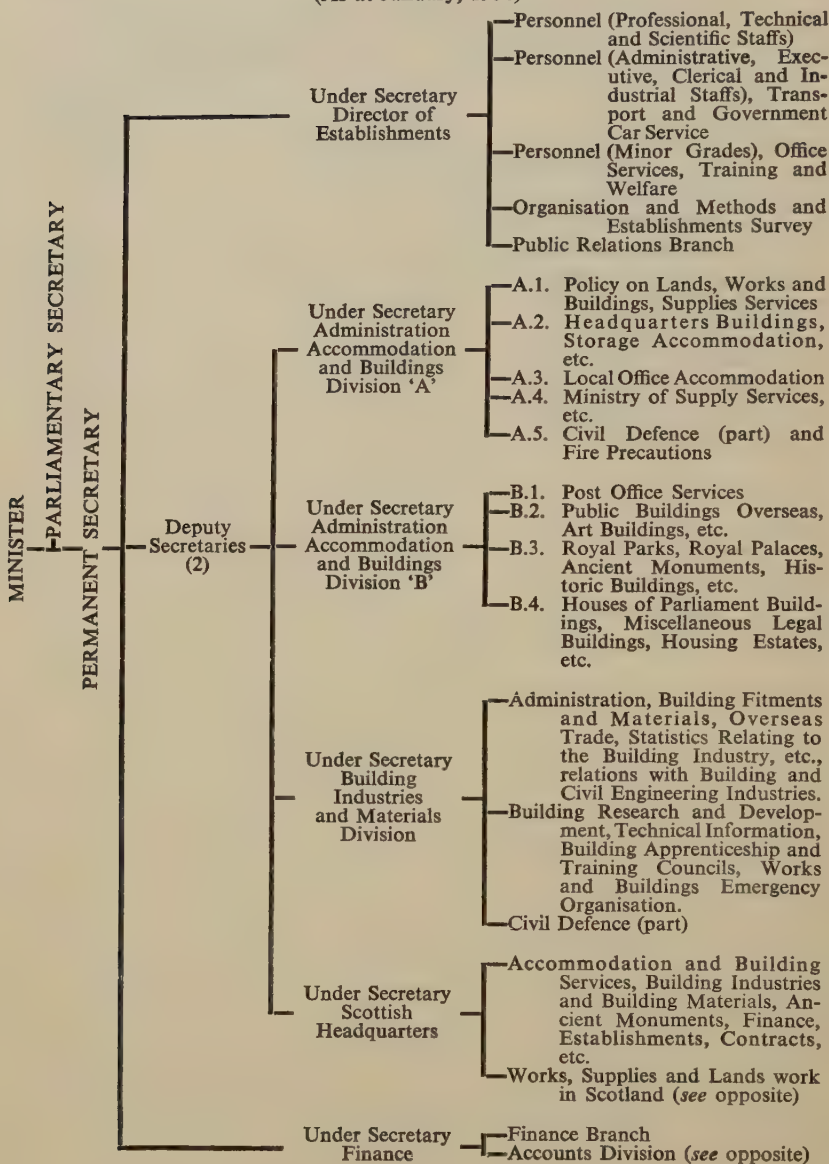


Chart II—Organisation of Executive Divisions and Specialist Groups

(As at January, 1956)

Accounts Division

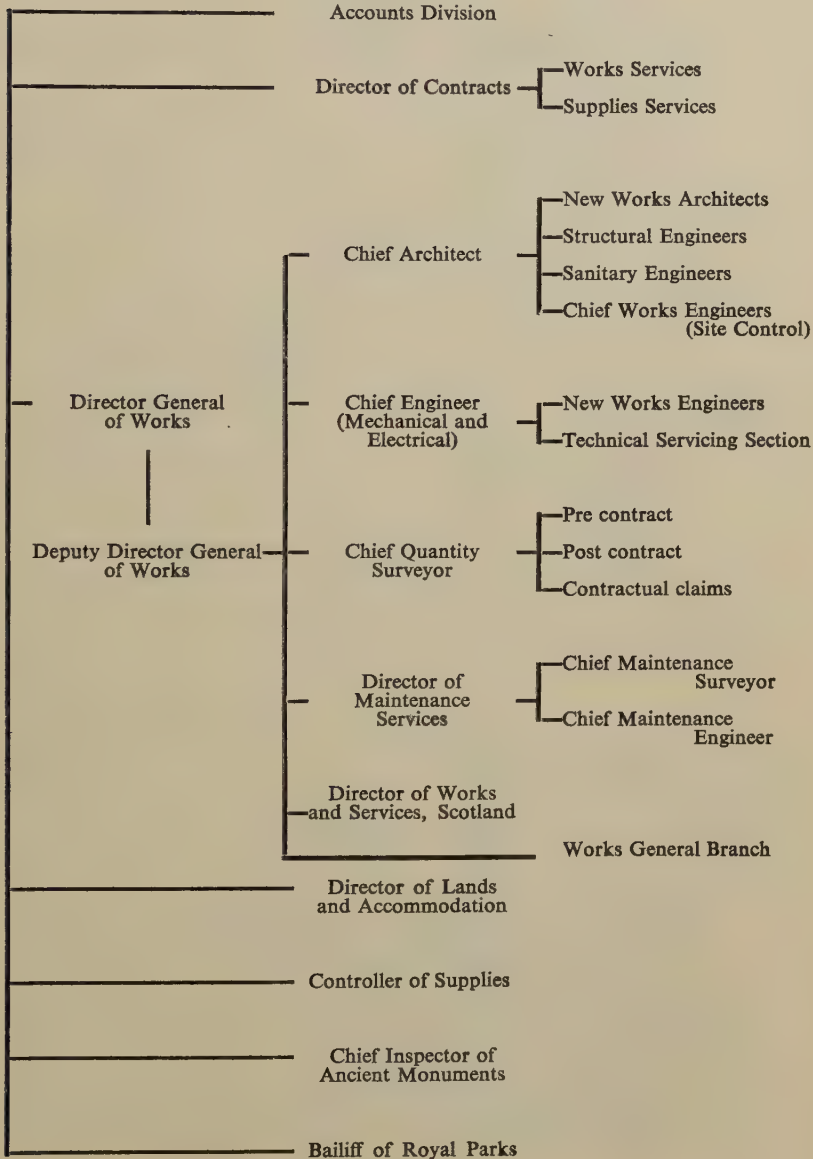
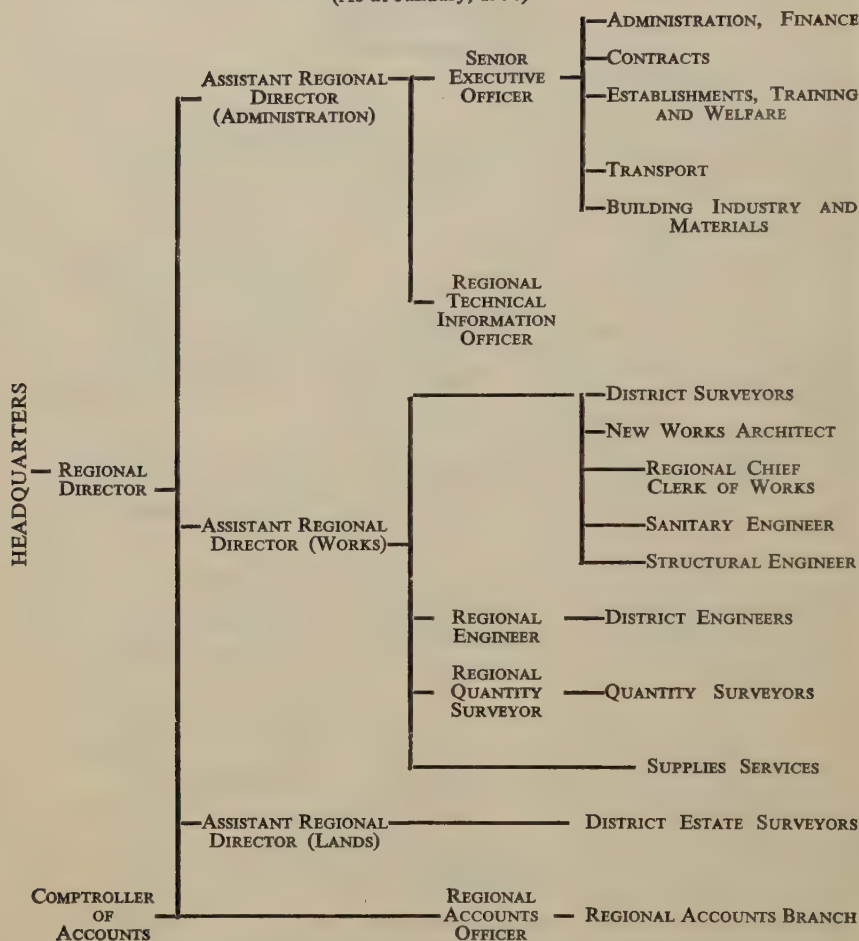


Chart III—Organisation of a Typical Region in England

(As at January, 1956)



1. The three main groups (administration, works and lands) are common to all Regions, each group headed by an officer responsible to the Regional Director. The composition of the sections may vary according to specific regional requirements and may be sub-divided or re-grouped in accordance with the volume of work.
2. In addition to the above regional organisation, there are two main supplies division area stores, each with some subsidiary stores, which are controlled entirely from Headquarters. The areas served by these stores do not correspond with the Regions.
3. In each Region there is an accounts branch controlled from Headquarters by the Comptroller of Accounts.
4. The organisation of the Central Office for Wales is on the same basis as that shown above.

Index

- Accommodation for Government Staff, 11, 17-20, 21, 25-46, 115, 117, 119, 150-154
- Accounting Officer, 115, 134
- Accounts Division, 115, 122
- Acts of Parliament (*see* under titles of Acts)
- Administrative Sections, 62, 68, 93, 115, 116-118, 124-125, 127, 143, 147, 152
- Admiralty, 34, 47
- Admiralty House, 26, 49
- Advisory Committee on Forestry, 61
- Advisory Committee of Specialists and Sub-Contractors, 102
- Advisory Council on Building Research and Development, 108-110, 118
- Advisory Council on Overseas Construction, 102-103
- Agriculture, Fisheries and Food, Ministry of, 34, 63, 133
- Air Ministry, 47, 49
- American Counterpart Funds, 112
- Ancient Monuments, 18, 82, 86-90, 93-94, 118, 120, 132, 145
- Ancient Monuments Acts (1882, 1913 and 1931), 86
- Ancient Monuments Boards, 87
- Ancient Monuments, Inspectorate of, 93-94, 118
- Apprenticeship Councils, 103-104
- Apsley House, 85
- Arboretum, Edinburgh, 63
- Archaeologists on the Ministry's staff, 93-94, 118
- Architects:
on the Ministry's staff, 45, 93, 116, 120, 135-136, 140-142, 148
in private practice, 122, 139, 148
- Armour, 80-81
- Art Galleries, 50, 57, 74
- Art, Works of, 46, 79-81
- Artists, 80
- Atomic Energy Authority, 34
- Atomic Energy Buildings, 11, 21, 29, 33
- Audley End, 86
- Auxiliary Fire Service, 47
- Bailiff of the Royal Parks, 62, 118
- Banqueting House, Whitehall, 15, 79
- Beefeaters, 12, 82
- Benmore, Forest of, 63
- Birds in the Royal Parks, 61
- Board of Control, 38
- Board of Inland Revenue, 18, 40
- Board of Trade, 99, 102, 105, 147
- Borstals, 38, 50
- Botanic Garden, Edinburgh, 62, 63
- Botanic Gardens, Kew, 63
- Brick Development Association, 105
- British Council, 37, 50
- British Museum, 74-75
- British Standards Institution, 105, 118
- Broadmoor, 38
- Brompton Cemetery, 11, 18, 62
- Buckingham Palace, 49, 64, 65
- Building Apprenticeship and Training Council, 103-104
- Building Industry, 12, 20, 97-112, 118, 128
- Building Industry Distributors, 105
- Building Licensing and Controls, 20, 97, 101
- Building Materials Industries, 12, 20, 97-106, 109, 118, 128
- Building Materials Producers, National Council of, 104-105
- Building Research, 12, 107-112, 118
- Building Research and Development, Advisory Council on, 108-110, 118
- Building Research Station, 107-108
- Bushy Park, 59, 60, 61
- Caernarvon Castle, 83
- Camps, 37
- Cardiff, Central Office for Wales, 21, 111, 115, 124, 125-128, 134, 143
- Carlton Gardens (Foreign Secretary's residence), 26, 49
- Cars, 123
- Carstairs, 38
- Castles, 82-83 (*see also* under names of Castles)
- Cathedrals, 86-87
- Ceremonial, 50, 67-69
- Chelsea, Royal Hospital, 84
- Chequers, 26
- Chief Architect, 116, 117, 120, 143
- Chief Engineer, 116, 117, 120, 143
- Chief Information Officer, 124
- Chief Inspector of Ancient Monuments, 93, 118
- Chief Maintenance Engineer, 121, 143
- Chief Maintenance Surveyor, 121, 143

- Chief Quantity Surveyor, 116, 117, 121
 Chief Scientific Adviser, 107
 Chief Works Engineer (Site Control), 120
 Chiswick House, 86
 Churches, 86
 Civil Defence, 39, 118
 Civil Engineering Industry, 12, 20, 97-112, 118, 128
 Cleaning, 51, 71
 Clerks of Works, 120, 141, 148
 Clocks, 51
 Coastguard Service, 36, 40
 Codes of Practice, 107, 118
 Cold Stores, 39
 Colonial Office, 42
 Commissioners of Crown Lands, 59-60, 64, 151
 Commissioners of Woods, Forests and Land Revenues, 16, 57, 60, 84
 Commissioners of Works, 16, 57
 Commissioners of Works Act (1852), 16, 152
 Committees:
 Advisory Committee on Forestry, 61
 Advisory Committee of Specialists and Sub-Contractors, 102
 Committee on Bird Sanctuaries in the Royal Parks, 61
 Committee on Litter in the Royal Parks, 62
 Plant Advisory Committee, 102
 Regional Joint Committees for the Building and Civil Engineering Industries, 101, 127
 Scientific Advisory Committee, 107
 Commonwealth Relations Office, 42, 68, 147
 Comptroller of Accounts, 122
 Conferences, 51, 65
 Constitution Hill Arch, 85
 Consultants, 122, 139, 148
 Contracts, 52-53, 118, 121, 136-139, 141, 144, 149
 Contracts Directorate, 115, 118, 137-139, 140
 Control, Board of, 38
 Controller of Supplies, 119
 Controller of Transport, 123
 Coronation, 50, 51, 68
 Councils (Ministry of Works):
 Apprenticeship and Training for the Electrical Contracting Industry, 104
 Building Apprenticeship and Training, 103-104
 Building Research and Development, 108-110, 118
 Historic Buildings, 91-92
 Councils (Ministry of Works):—*contd.*
 National Consultative, 101
 Overseas Construction, 102
 Council for the Preservation of Rural England, 90
 Council for the Preservation of Rural Wales, 90
 Council of Industrial Design, 48
 County Courts, 72
 Courts of Law in Scotland, 73
 Crown Lands Act (1851), 16, 58, 59
 Crown Lands, Commissioners of, 59-60, 64, 151
 Curator of Pictures, 80
 Custody Services, 119, 146
 at Ancient Monuments, 88, 145
 Customs and Excise buildings, 17, 40
 Decorations, 67
 Deer, 60
 Department of Agriculture for Scotland, 34, 133
 Department of Scientific and Industrial Research, 18, 34, 50, 107, 133
 Departmental Joint Industrial Council, 146-147
 Departmental Whitley Council, 130
 Depots:
 Fuel, 52
 Works, 146
 Director of Contracts, 137
 Director of Establishments, 122, 130, 146
 Director General of Works, 116, 120, 143
 Director of Maintenance Services, 116, 121, 143
 Director of Works and Services in Scotland, 125
 Directorate of Emergency Works, 20
 Directorate of Establishments, 122-124, 129
 Directorate of Lands and Accommodation, 116, 119, 139, 152-154
 Disposals:
 Land, 119, 153
 Supplies, 51
 Dover Castle, 83
 Downing Street, 26, 49
 Duddingston Loch, 61
 Duke of York's Royal Military School, 38
 Edinburgh:
 Castle, 82, 83
 The Ministry's Headquarters, 21, 62, 68, 111, 115, 124-125, 134, 143
 Royal Botanic Garden, 63

- Electrical Contracting Industry Apprenticeship and Training Council, 104
 Embassies, 42–46
 Emergency Works, Directorate of, 20
 Employment Exchanges, 30
 Engineers, 51, 116, 120, 141, 143
 Establishment Survey Branch, 124
 Establishments, Directorate of, 122–124, 129
 Estate Management, 119, 150–154
 Estate Surveyors, 119, 154
 European Productivity Agency, 112
 Excavations, 88, 93
 Executive Divisions, 115–116, 117, 118–122

 Factories, 19, 20, 34, 50
 Finance Division, 122, 134–135
 Fire Prevention, 39–40
 First Commissioners of Works, 13, 16
 Floodlighting, 68
 Foreign Office, 42, 68, 147
 Forestry, Advisory Committee on, 61
 Forestry Commission, 36
 Frogmore House, 64
 Fuel, 51–52, 119
 Fuel and Power, Ministry of, 21, 34, 40, 133, 154
 Furniture, 32, 45, 47–51, 117, 119, 155

 Galleries, 50, 57, 74
 Gardens, 45, 57–64, 145
 Georgian Group, 90
 Government Car Service, 123
 Grace and Favour Residences, 65
 Green Park, 58
 Greenwich:
 National Maritime Museum, 84
 Painted Hall, 79, 84
 Park, 59
 Queen's House, 15, 84
 Royal Naval College, 84
 Grosvenor Square Gardens, 62

 Hall, Sir Benjamin, 13, 17
 Ham House, 85
 Hampton Court:
 Gardens, 57
 Palace, 49, 65, 79
 Park, 59, 60
 Health, Ministry of, 18
 Herbarium, Kew, 64
 Historic Buildings, 90–94, 118, 132
 Historic Buildings and Ancient Monuments Act (1953), 12, 86, 91
 Historic Buildings Bureau, 92

 Historic Buildings Councils, 91–92
 Historic Buildings of the Crown, 82–86
 Holyroodhouse, Palace of, 49, 60, 66, 68
 Holyrood Park, 60
 Home Office, 38, 39, 68
 Hospitals, 38, 50
 Hostels, 37, 50
 Houses, 20, 36, 42–46
 Houses of Parliament, 17, 49, 70–72, 80, 132
 Hyde Park, 58, 62

 Industrial Staff, 62, 143, 144–146
 Information Branch, 124
 Inland Revenue, Board of, 18, 40
 Inspectorate of Ancient Monuments, 93–94, 118

 Joint Advisory Committee for Wales, 101
 Joint Advisory Panel, 101

 Kensington:
 Gardens, 58
 Palace, 49, 65, 80
 Kew Gardens, 63
 Kew Palace, 49, 65

 Laboratories, 34, 48, 50, 63, 74
 Ancient Monuments Laboratory, 93
 Labour and National Service, Ministry of, 18, 30, 31
 Lancaster House, 49, 84
 Lands and Accommodation, Directorate of, 36, 116, 119, 139, 152–154
 Lansbury, George, 13, 62
 Law Courts, 50, 72
 Libraries, 74, 75
 Library (Ministry of Works), 111, 123
 Lido, Hyde Park, 13, 62
 Lifts, 45, 142, 145
 Linlithgow Peel, 60
 Litter, 62
 Lord Chamberlain's Office, 49, 65, 67, 68
 Lord Great Chamberlain, 70, 71

 Maintenance Services, Director of, 116, 120, 121, 143
 Maintenance Work, Organisation, 117, 121, 136, 138, 142–148
 Marlborough House, 65
 Married Quarters, 37, 50
 Military Knights' Houses, Windsor, 64
 Ministry (*see* under names of Ministries)
 Ministry of Works—assumption of title, 20

- Mobile Labour Force, 21, 145
 Moss Side, 38
 Munitions, Ministry of, 18
 Museums, 50, 74-75 (*see also* under names of Museums)

 National Assistance Board, 30, 31, 37, 38
 National Buildings Record, 91
 National Consultative Council, 101
 National Council of Building Materials Producers, 104-105
 National Maritime Museum, 84
 National Trusts, 85, 86, 90, 92
 N.A.T.O., 42
 Natural History Museum, 50, 74, 75
 Nelson's Column, 78
 Night Watchmen, 119
 Northern Ireland, 40

 Office of Works, 15-19
 Offices, 25, 26-32, 35, 42-45, 47, 133, 151, 155
 Official Residences, 26, 49, 65, 80
 abroad, 42-46, 81
 Opencast Coal, 40, 119
 Organisation and Methods Branch, 124
 Organisation for European Economic Co-operation, 112
 Ornithologists, 61
 Osborne, 62, 66
 Osterley Park, 85
 Overseas Construction, Advisory Council on, 102
 Overseas services, 42-46, 81, 120, 132, 147-150

 Painted Hall, Greenwich, 79, 84
 Palaces, 49, 64-66, 132, 150 (*see also* under names of Palaces)
 Palm House, Kew, 63
 Park-keepers, 62
 Parks, 57-63, 77, 117, 119, 132, 145, 146, 150 (*see also* under names of Parks)
 Parks Regulation Acts (1872 and 1926), 58, 63
 Parliament, Acts of (*see* under titles of Acts)
 Parliament House (Edinburgh), 73
 Parliament, Houses of, 49, 70-72, 80, 132
 Parliament Square, 62, 79
 Patent Office, 76
 Pensions, Ministry of, 18
 Pensions and National Insurance, Ministry of, 30, 31, 38

 Permanent Secretary, 67, 115, 130, 131, 132, 134
 Photographic Services, 93, 123
 Pictures, 65, 74, 80
 Pilgrim Trust, 90
 Planning Legislation, 21, 61, 91, 105, 119, 152
 Plant Advisory Committee, 102
 Police, 38, 62, 68
 Post Office, 19, 35-36, 150
 Post Office Loan Account, 36
 "Post-War Building Studies", 107
 Prefabricated Buildings, 106
 Primrose Hill, 59
 Prisons, 36, 38, 50
 Public Records Office, 75
 Public Statutes (Metropolis) Act (1854), 76, 78

 Quantity Surveyors:
 on the Ministry's staff, 116, 121
 in private practice, 122
 Queen Mary's Hospital, Roehampton, 38
 Queen's Beasts, 78
 Queen's House, Greenwich, 15, 84

 Rampton, 38
 Reception Centres, 38
 Records, 75-76
 Regent's Park, 59
 Regional Joint Committees for the Building and Civil Engineering Industries, 101, 127
 Regional Organisation, 21, 106, 111, 115, 124, 125-128, 132, 134, 136, 137, 143
 Regius Keeper, 63
 Removals, 51
 Remploi Limited, 38
 Requisitioning, 28, 119, 121, 152
 Research Buildings, 21, 33-35, 133
 Residences:
 abroad, 42-46, 81
 in the U.K., 26, 49, 65, 80
 Richmond Park, 59, 60, 61, 62
 Old Deer Park, 59
 Roehampton, Queen Mary's Hospital, 38
 Royal Botanic Garden, Edinburgh, 62, 63
 Royal Botanic Gardens, Kew, 63
 Royal Commissions on Historical Monuments, 90
 Royal Courts of Justice, 72
 Royal Fine Art Commission, 78, 140
 Royal Hospital, Chelsea, 84
 Royal Naval College, 84

- Royal Palaces, 49, 64-66, 132, 150 (*see also* under names of Palaces)
- Royal Parks, 57-63, 77, 117, 119, 132, 145, 146, 150 (*see also* under names of Parks)
- St. James's Palace, 49, 65
- St. James's Park, 58
- Sanitary Engineers, 120, 143
- Science Museum, 75, 76
- Scientific Advisory Committee, 107
- Scientific and Industrial Research, Department of, 18, 34, 50, 107, 133
- Scientists, 12, 107
- Scotland, the Ministry's Headquarters, 21, 62, 68, 111, 115, 124-125, 134, 143
- Scottish Home Department, 68
- Sculpture, 76-78, 80
- Service Departments, 36, 47, 133, 142
- Sheriff Courthouses, 73
- Society for the Protection of Ancient Buildings, 90
- Specialists and Sub-Contractors, Advisory Committee of, 102
- Staff Associations, 129-130
- Staffing, 12, 72, 93, 115-130, 144-147
- Standards, 31-32, 45, 48, 116, 143
- State Portrait, 80
- Stationery Office, 39, 53
- Statistics of Trade Act (1947), 100
- Statues, 76-79, 85
- Stirling Castle, 82, 83
- Storage Buildings, 38-39, 50, 52, 74, 153
- Stores (Supplies Division), 38-39, 53, 119, 146
- Structural Engineers:
on the Ministry's staff, 120, 143
in private practice, 122
- Superintendents of Royal Parks, 26, 62
- Supplies, 46, 47-54, 119, 138
- Supplies Division, 47-54, 116, 119, 137, 139-140, 145
- Supply, Ministry of, 33, 36, 50, 133
- Surveyor-General, 15, 16
- Surveyors, 120, 143
- Tapestries, 49, 81
- Tax Offices, 30
- Teachers' Training Colleges, 38
- Technical Information Service, 110-112
- Telephone Exchanges, 19, 35
- Temporary Buildings, 29, 30
- Tower of London, 80, 82, 86
- Town and Country Planning Act (1944), 91
- Town and Country Planning Act (1947), 91, 119, 152
- Trade, Board of, 99, 102, 105, 147
- Trades Unions, 12, 146
- Trafalgar Square, 79, 121
- Training Centres, 37-38
- Transport Services, 123-124, 145
- Treasury, 16, 32, 47, 53, 117, 133-136, 140
- Treasury Solicitor, 116, 139, 149, 153
- Trees, in Royal Parks, 61, 62
- Typing Services, 123, 129
- United Nations, 42
- Victoria and Albert Museum, 78, 85
- Victoria Tower Gardens, 62
- Votes, 36, 40, 132, 133
- Wales, The Ministry's Central Office for, 21, 111, 115, 124, 125-128, 134, 143
- Walmer Castle, 82
- War:
1914-18, 18
1939-45, 12, 19-21, 97, 107
- War Office, 47, 49
- Westminster Abbey, 50, 51, 68, 86
- Westminster Hall, 17, 70
- Westminster, Palace of, 17, 70-72
- Whitehall Palace, 58, 65
- Whitley Council, 32, 130
- Window Boxes, 62
- Windsor:
Castle, 49, 64, 65
Great Park, 64
Home Park, 64
- Woods, Forests and Land Revenues, Commissioners of, 16, 57, 60, 84
- Works and Buildings Emergency Organisation, 106
- Works General Branch, 121
- Workshops, 51, 123, 146
- Yeomen Warders, 12, 82
- Zoological Society of London, 57



GEORGE ALLEN & UNWIN LTD

London: 40 Museum Street, W.C.1

Auckland: 24 Wyndham Street

Bombay: 15 Graham Road, Ballard Estate, Bombay 1

Calcutta: 17 Chittaranjan Avenue, Calcutta 13

Cape Town: 109 Long Street

Karachi: Haroon Chambers, South Napier Road, Karachi 2

New Delhi: 13-14 Ajmeri Gate Extension, New Delhi 1

São Paulo: Avenida 9 de Julho 1138-Ap. 51

Sydney, N.S.W.: Bradbury House, 55 York Street

Toronto: 91 Wellington Street West

THE NEW WHITEHALL SERIES

THE HOME OFFICE

Sir Frank Newsam

‘An eminently readable book which will repay close study. The author has succeeded in avoiding wearisome detail and has presented in appropriate balance an historical survey and a scholarly exposition of the functions of the Secretary of State.’—VISCOUNT WAVERLEY in *The Sunday Times*.

‘The book preserves a nice balance between official accuracy and human interest, and is written as if it were meant to be read.’—*The Times*.

‘An excellent painstaking guide book, like an anatomical drawing, in which nothing is left out and nothing is obscure. One could not want a better work of reference, on this scale.’—*The Manchester Guardian*.

Demy 8vo. 2nd Impression. 15s. net

THE FOREIGN OFFICE

Lord Strang

‘The Foreign Office, its methods of work, the methods of work of its various representatives abroad . . . For information on all those points there could be no better book. It is clear and accurate and yet remains very readable.’—*Glasgow Herald*.

‘If the efficiency of the Foreign Service is a more vital national interest than ever before, it is a duty for every serious citizen to read carefully this comprehensive and deeply informative book.’—*The Sunday Times*.

‘Admirably written with clarity and wit . . . all who take interest in foreign affairs will gain by learning how a skilled and devoted service defines its aim and methods.’—*Economist*.

Demy 8vo. 2nd Impression. 15s. net

THE NEW WHITEHALL SERIES

THE COLONIAL OFFICE

Sir Charles Jeffries

The book opens with a brief introduction describing in broad outline the work and tradition of the Office. It then proceeds to consider the nature of the responsibilities of the Secretary of State and of the Office and follows this description with a survey of the various territories for whose good government they are concerned. After showing how the Office has expanded and adapted its organization to meet the changing demands made on it, the book describes the main aspects of its work today. A concluding chapter takes stock of developments over the last thirty years and suggests some possible lines of future evolution.

‘An informative and useful book.’—*The Scotsman*.

‘... detailed and factual yet extremely warm-hearted.’—
Evening News

Demy 8vo. 15s. net



In preparation

THE MINISTRY OF LABOUR AND
NATIONAL SERVICE

THE MINISTRY OF PENSIONS AND
NATIONAL INSURANCE

THE MINISTRY OF TRANSPORT
AND CIVIL AVIATION

THE SCOTTISH OFFICE

THE NEW TOWN AND COUNTY HALL SERIES

THE FINANCE OF LOCAL GOVERNMENT

J. M. Drummond

This is a well-written survey of local government finance, includes an outline of the rating system, the new valuation procedure under the Local Government Act, 1948, the preparation of rate estimates and budgetary control, audit and supervision by the central government, exchequer grants to local authorities, etc.

‘Everyone who has the well-being of local government at heart or who believes that an active, healthy interest and participation in local affairs is essential to the welfare of the country owes Mr. Drummond a debt of gratitude for his admirably written and lucid book on the finance of local government. It provides technical and non-technical readers with a concise and comprehensive survey of the field, which is eminently readable and easily understood. . . . The reading of this book is strongly recommended.’—*Local Government Finance*.

Demy 8vo. 2nd Impression. 20s. net

THE ENGLISH LOCAL GOVERNMENT SYSTEM

J. H. Warren

‘It will undoubtedly be useful to any municipal officer who wishes to increase his knowledge, or to obtain general information for the purpose of examinations. It will give the municipal officer . . . up-to-date information and, indeed, newly-elected councillors or others who are interested in the processes of local government will find it equally valuable.’—*Local Government Service Review*.

‘By far the best book so far written by a local government officer.’—*The Listener*.

Cr. 8vo. Revised Edition, 6th Impression. 12s. 6d. net

THE CIVIL SERVICE

Frank Dunnill

'A valuable contribution, for he shows the Service and its members in their human as well as official aspects.'—*Birmingham Post*.

'This is a thoughtful, balanced and honest book about our Civil Service. The author is fresh-minded, fair in outlook and critical of the official machine where he thinks criticism is justified. A useful book this. Whether one agrees with it all or not, it is honest and forthcoming. It is another valuable contribution to the study of our public administration.'—The Right Honble. Herbert Morrison in *The Observer*.

'Here is a critical yet sympathetic study of the Civil Service.'—*Sunday Times*.

Demy 8vo. 18s. net

MODERN FORMS OF GOVERNMENT

Michael Stewart

Describes both the formal constitution and the actual working of the government in some twenty countries. While each country is treated separately, so that the reader can readily obtain a concise account of the government of, e.g. France, Pakistan, or the U.S.A., the book deals with ideas and principles as well as facts. The chapter describing the Commonwealth countries precedes an examination of the development and potentialities of the unique Commonwealth form of association; the description of the U.S.A., Germany, and Switzerland, is followed by a discussion of Federalism; and an inquiry into the Communist conception of politics precedes the description of Communist governments.

Demy 8vo. about 18s. net

GEORGE ALLEN AND UNWIN LTD

HD4147. E5



a39001



001970071b

